



Whiting Petroleum Corporation
and its wholly owned subsidiary
Whiting Oil and Gas Corporation

1700 Broadway, Suite 2300, Denver, CO 80290-2300
Phone: 303.837.1661 | FAX: 303.861.4023

October 30, 2017

Ms. Alex North
U.S. EPA, Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

(via email)

RE: Whiting Oil and Gas Corporation
NSPS OOOOa Annual Report (August 2, 2016 – August 1, 2017)

Dear Ms. North:

Whiting Oil and Gas Corporation (Whiting) currently owns and operates a number of onshore affected facilities identified in § 60.5365a of the Oil and Natural Gas Sector: New Source Performance Standards (NSPS) Subpart OOOOa, 40 CFR §§ 60.5360a et seq. With this submittal, Whiting is providing the requisite information and satisfying the annual reporting requirements specified in § 60.5420a(b).

Whiting is proposing to modify the Reporting Period and Report Date after the submittal of this Report. To better align with current data collection and quality assurance processes and other reporting mechanisms, Whiting will change the Reporting Period to calendar year January 1 through December 31, with the Report due by March 31 each year. To accomplish this, Whiting plans to submit a report by March 31, 2018 to cover the remainder of the 2017 calendar year of August 2 through December 31, 2017. After that, the next Report due by March 31, 2019 will cover the Reporting Period of January 1 through December 31, 2018.

If you have questions regarding the information contained herein, please contact me at (303) 390-1353 or by email at andrea.huggins@whiting.com.

Sincerely,
Whiting Oil and Gas Corporation

(b) (6)

A large black rectangular redaction box covering the signature and name of the sender.

Andrea Huggins
Principal Engineer

Enclosure

NSPS OOOOa Annual Report
Pursuant to 40 CFR § 60.5420a(b)

Company Information
§60.5420a(b)(1)

Company Name: Whiting Oil & Gas Corporation

Company Mailing Address:	<u>1700 Broadway, Suite 250</u>	<u>Denver</u>	<u>Colorado</u>	<u>80290</u>
	Street Address	City	State	Zip Code

For information regarding this report please contact the following:

Contact Name: Andrea Huggins

Contact Phone Number: (303) 390-1353

Contact Email Address: andrea.huggins@whiting.com

Reporting Period

Compliance Period Start Date: 8/2/2016

Compliance Period End Date: 8/1/2017

Date Report Submitted: 10/30/2017

Certification By a Responsible Official

Statement of Certification: Based on information and belief formed after reasonable inquiry, the statements and information in this document are true, accurate, and complete.

Name of Certifying Official: Rick Ross

Title of Certifying Official: Senior Vice President, Operations

Email Address: rickr@whiting.com

Phone Number: (303) 837-4236

Signature: _____

(b) (6)

Signature Date: 10/27/2017

List of Affected Facilities - NSPS Subpart OOOOa

§60.5420a(b)(1)(i) and (ii)

US Well ID / API Number	Facility/Well Name	Site Location		Affected Facility Type(s) (Place an 'X' in Every Column That Applies)							
		Lat.	Long.	Well Completion	Storage Vessel	Reciprocating Compressor	Centrifugal Compressor	Pneumatic Controller	Pneumatic Pump	Well Site Fugitives	Compressor Station Fugitives
3308900881	3J TRUST 24-8-2PH	(b) (9)		X							
3308900882	3J TRUST 34-8-2PH	(b) (9)		X							
3308900890	BUCKMAN 24-21PH	(b) (9)									
		(b) (9)		X							
3308900892	BUCKMAN 34-9-2PH	(b) (9)		X							
3308900893	BUCKMAN 44-9PHU	(b) (9)		X							
3305306884	CHAMELEON STATE 31-16-1H	(b) (9)		X							
3305307649	CHAMELEON STATE 31-16HU	(b) (9)		X							
3305301642	DORE 3-10X	(b) (9)		X							
3310504339	EVITT 14-12-4TFHX	(b) (9)	(b) (9)	X							
3310504072	EVITT 14-12H	(b) (9)		X							
3310504074	EVITT 14-12TFH	(b) (9)									
		(b) (9)		X							
3310504162	EVITT 34-12H	(b) (9)		X							
3310504161	EVITT 34-12TFH	(b) (9)		X							
3306103848	FLADELAND 13-27H	(b) (9)		X							
3305307530	FLATLAND 43-9-1H	(b) (9)		X							
3305307531	FLATLAND 43-9-1XH	(b) (9)		X							
3305307529	FLATLAND 43-9-2H	(b) (9)		X							
3305307528	FLATLAND 43-9HU	(b) (9)		X							
3308900880	FRANK 24-7PH	(b) (9)	(b) (9)	X							
3308900886	FRANK 34-7-2PH	(b) (9)		X							
3308900887	FRANK 44-7PHU	(b) (9)		X							
3308900888	FROEHLICH 21-28-2PH	(b) (9)		X							
3308900889	FROEHLICH 31-28PH	(b) (9)		X							
3306100844	HANSEN 21-3TFH	(b) (9)		X							
3308900879	HECKER 11-18-2PH	(b) (9)		X							
512341651	HORSETAIL 07E-0601	(b) (9)		X							
512341647	HORSETAIL 07E-0602	(b) (9)		X							
51234164901	HORSETAIL 07E-0603	(b) (9)		X							
512341652	HORSETAIL 07E-0604	(b) (9)		X							
512341650	HORSETAIL 07E-0634	(b) (9)		X							
512341648	HORSETAIL 07E-0636	(b) (9)		X							
512341641	HORSETAIL 07E-1801	(b) (9)		X							
512341643	HORSETAIL 07E-1802	(b) (9)		X							
512341644	HORSETAIL 07E-1803	(b) (9)		X							
512341645	HORSETAIL 07E-1804	(b) (9)		X							

List of Affected Facilities - NSPS Subpart OOOOa

§60.5420a(b)(1)(i) and (ii)

US Well ID / API Number	Facility/Well Name	Site Location		Affected Facility Type(s) <i>(Place an 'X' in Every Column That Applies)</i>							
		Lat.	Long.	Well Completion	Storage Vessel	Reciprocating Compressor	Centrifugal Compressor	Pneumatic Controller	Pneumatic Pump	Well Site Fugitives	Compressor Station Fugitives
512341642	HORSETAIL 07E-1834	(b) (9)	(b) (9)	X							
512341646	HORSETAIL 07E-1836	(b) (9)	(b) (9)	X							
512341778	HORSETAIL 07F-0607	(b) (9)	(b) (9)	X							
512341770	HORSETAIL 07F-0608	(b) (9)	(b) (9)	X							
512341774	HORSETAIL 07F-1805	(b) (9)	(b) (9)	X							
512341769	HORSETAIL 07F-1806	(b) (9)	(b) (9)	X							
512341782	HORSETAIL 07F-1807	(b) (9)	(b) (9)	X							
512341779	HORSETAIL 07F-1808	(b) (9)	(b) (9)	X							
512341781	HORSETAIL 07F-1838	(b) (9)	(b) (9)	X							
512341771	HORSETAIL 07F-1839	(b) (9)	(b) (9)	X							
512342111	HORSETAIL 07G-0609	(b) (9)	(b) (9)	X							
512342114	HORSETAIL 07G-0610	(b) (9)	(b) (9)	X							
512342118	HORSETAIL 07G-1809	(b) (9)	(b) (9)	X							
512342126	HORSETAIL 07G-1810	(b) (9)	(b) (9)	X							
512342115	HORSETAIL 07G-1811	(b) (9)	(b) (9)	X							
512342121	HORSETAIL 07G-1812	(b) (9)	(b) (9)	X							
512342112	HORSETAIL 07G-1844	(b) (9)	(b) (9)	X							
512341836	HORSETAIL 07H-0613	(b) (9)	(b) (9)	X							
512343043	HORSETAIL 07H-0615	(b) (9)	(b) (9)	X							
512341834	HORSETAIL 07H-0646	(b) (9)	(b) (9)	X							
512341829	HORSETAIL 07H-0647	(b) (9)	(b) (9)	X							
512341832	HORSETAIL 07H-1813	(b) (9)	(b) (9)	X							
512341841	HORSETAIL 07H-1814	(b) (9)	(b) (9)	X							
512341831	HORSETAIL 07H-1815	(b) (9)	(b) (9)	X							
512341840	HORSETAIL 07H-1816	(b) (9)	(b) (9)	X							
512341839	HORSETAIL 07H-1846	(b) (9)	(b) (9)	X							
512341830	HORSETAIL 07H-1847	(b) (9)	(b) (9)	X							
512341448	HORSETAIL 08B-1742	(b) (9)	(b) (9)	X							
512341481	HORSETAIL 08B-1743	(b) (9)	(b) (9)	X							
512342852	HORSETAIL 08C-1707	(b) (9)	(b) (9)	X							
51234285001	HORSETAIL 08C-1708	(b) (9)	(b) (9)	X							
512342847	HORSETAIL 08C-1738	(b) (9)	(b) (9)	X							
512342848	HORSETAIL 08C-1739	(b) (9)	(b) (9)	X							
512341445	HORSETAIL 08D-1734	(b) (9)	(b) (9)	X							
512341446	HORSETAIL 08D-1735	(b) (9)	(b) (9)	X							
51233880701	HORSETAIL 29G-2043	(b) (9)	(b) (9)	X							
512341768	HORSETAIL FED 07F-0605	(b) (9)	(b) (9)	X							

List of Affected Facilities - NSPS Subpart OOOOa

§60.5420a(b)(1)(i) and (ii)

US Well ID / API Number	Facility/Well Name	Site Location		Affected Facility Type(s) <i>(Place an 'X' in Every Column That Applies)</i>							
		Lat.	Long.	Well Completion	Storage Vessel	Reciprocating Compressor	Centrifugal Compressor	Pneumatic Controller	Pneumatic Pump	Well Site Fugitives	Compressor Station Fugitives
512341772	HORSETAIL FED 07F-0606	(b) (9)	(b) (9)	X							
51234178301	HORSETAIL FED 07F-0639	(b) (9)	(b) (9)	X							
512341773	HORSETAIL FED 07F-0640	(b) (9)	(b) (9)	X							
512342117	HORSETAIL FED 07G-0611	(b) (9)	(b) (9)	X							
512342116	HORSETAIL FED 07G-0612	(b) (9)	(b) (9)	X							
512342109	HORSETAIL FED 07G-0642	(b) (9)	(b) (9)	X							
512342110	HORSETAIL FED 07G-0643	(b) (9)	(b) (9)								
				X							
3310504315	IRGENS 41-17-1TFH	(b) (9)	(b) (9)	X							
3310504316	IRGENS 41-17-2H	(b) (9)	(b) (9)	X							
3305307308	KOALA 14-32-2H	(b) (9)	(b) (9)	X							
3305307309	KOALA 14-32HU	(b) (9)	(b) (9)								
				X							
3305307520	KOALA 31-25-2H	(b) (9)	(b) (9)	X							
3305307519	KOALA 31-25-2TFH	(b) (9)	(b) (9)	X							
3305307521	KOALA 31-25-3H	(b) (9)	(b) (9)	X							
3305307409	KOALA 44-31-2TFH	(b) (9)	(b) (9)	X							
3305307403	KOALA 44-31-3TFH	(b) (9)	(b) (9)	X							
3305307404	KOALA 44-31H	(b) (9)	(b) (9)	X							
3305307402	KOALA 44-31TFH	(b) (9)	(b) (9)	X							
3305306881	KOALA 44-5-2H	(b) (9)	(b) (9)	X							
3305306883	KOALA 44-5-3H	(b) (9)	(b) (9)	X							
3305307015	KOALA 44-5TFHU	(b) (9)	(b) (9)	X							
3305307518	KOALA FEDERAL 31-25H	(b) (9)	(b) (9)	X							
3305307516	KOALA FEDERAL 31-25HU	(b) (9)	(b) (9)	X							
3305307517	KOALA FEDERAL 31-25TFH	(b) (9)	(b) (9)	X							
3305305053	KOALA WOLD 153-97-1-5-29-2H	(b) (9)	(b) (9)	X							
3306103830	LIFFRIG 11-27-2H	(b) (9)	(b) (9)	X							
3305306908	LOOMER 44-33-2H	(b) (9)									
			(b) (9)	X							
3305306909	LOOMER 44-33TFHU	(b) (9)	(b) (9)	X							
3310504270	LUKENBILL 34-11-1H	(b) (9)	(b) (9)	X							
3310504269	LUKENBILL 34-11-1TFH	(b) (9)	(b) (9)	X							
3310504267	LUKENBILL 34-11-2H	(b) (9)	(b) (9)	X							
3310504268	LUKENBILL 34-11-2TFH	(b) (9)	(b) (9)	X							
3306103807	MCNAMARA 41-26-2XH	(b) (9)	(b) (9)	X							
3306103808	MCNAMARA 41-26H	(b) (9)	(b) (9)	X							

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§60.5420a(b)(1)(i) and (ii)

US Well ID / API Number	Facility/Well Name	Site Location		Affected Facility Type(s) <i>(Place an 'X' in Every Column That Applies)</i>							
		Lat.	Long.	Well Completion	Storage Vessel	Reciprocating Compressor	Centrifugal Compressor	Pneumatic Controller	Pneumatic Pump	Well Site Fugitives	Compressor Station Fugitives
3306103805	MCNAMARA 42-26-2XH	(b) (9)	(b) (9)	X							
3306103806	MCNAMARA 42-26-3XH	(b) (9)	(b) (9)	X							
3302502650	MOCCASIN CREEK 8-26-27-4H	(b) (9)	(b) (9)	X							
3302502651	MOCCASIN CREEK 8-26-27-4H3	(b) (9)	(b) (9)	X							
3302502648	MOCCASIN CREEK 8-26-27-5H	(b) (9)	(b) (9)	X							
3302502649	MOCCASIN CREEK 8-26-27-5H3	(b) (9)	(b) (9)	X							
3310504351	NELSON 11-18-2TFHU	(b) (9)	(b) (9)	X							
3310504309	NELSON 11-18H	(b) (9)	(b) (9)	X							
3310504310	NELSON 11-18TFH	(b) (9)	(b) (9)	X							
3310504350	NELSON 11-18TFHU	(b) (9)	(b) (9)	X							
3310504370	NELSON 21-18-2TFH	(b) (9)	(b) (9)	X							
3310504371	NELSON 21-18TFH	(b) (9)	(b) (9)	X							
3310504301	NORTHERN 31-30-1H	(b) (9)	(b) (9)	X							
3310504302	NORTHERN 31-30-1TFH	(b) (9)	(b) (9)	X							
3310504304	NORTHERN 31-30-2H	(b) (9)	(b) (9)	X							
3310504303	NORTHERN 31-30-2TFH	(b) (9)	(b) (9)	X							
3308900885	OBRIGEWITCH 24-9PH	(b) (9)	(b) (9)	X							
3308900869	OBRIGEWITCH 44-8PHU	(b) (9)	(b) (9)	X							
3308900871	PRIVRATSKY 41-28PHU	(b) (9)	(b) (9)	X							
3308900872	PRIVRATSKY 44-21PHU	(b) (9)	(b) (9)	X							
512338545	RAZOR 12G-0109A	(b) (9)	(b) (9)	X							
51233854100	RAZOR 12G-0110B	(b) (9)	(b) (9)	X							
512338543	RAZOR 12G-0111A	(b) (9)	(b) (9)	X							
512336949	RAZOR 12G-0112B	(b) (9)	(b) (9)	X							
51233915200	RAZOR 12H-0113A	(b) (9)	(b) (9)	X							
512339154	RAZOR 12H-0115A	(b) (9)	(b) (9)	X							
51233914600	RAZOR 12H-0116B	(b) (9)	(b) (9)	X							
512342598	RAZOR 25M-2402	(b) (9)	(b) (9)	X							
512342594	RAZOR 25M-2434	(b) (9)	(b) (9)	X							
512343935	RAZOR 26I-2346	(b) (9)	(b) (9)	X							
51234393	RAZOR 26I-2347	(b) (9)	(b) (9)	X							
512343931	RAZOR FED 26I-3546	(b) (9)	(b) (9)	X							
51234393201	RAZOR FED 26I-3547	(b) (9)	(b) (9)	X							
512338544	RAZOR FEDERAL 12G-1309A	(b) (9)	(b) (9)	X							
512338542	RAZOR FEDERAL 12G-1310B	(b) (9)	(b) (9)	X							
51233854601	RAZOR FEDERAL 12G-1311A	(b) (9)	(b) (9)	X							
512338547	RAZOR FEDERAL 12G-1312B	(b) (9)	(b) (9)	X							

List of Affected Facilities - NSPS Subpart OOOOa

§60.5420a(b)(1)(i) and (ii)

US Well ID / API Number	Facility/Well Name	Site Location		Affected Facility Type(s) (Place an 'X' in Every Column That Applies)							
		Lat.	Long.	Well Completion	Storage Vessel	Reciprocating Compressor	Centrifugal Compressor	Pneumatic Controller	Pneumatic Pump	Well Site Fugitives	Compressor Station Fugitives
512339147	RAZOR FEDERAL 12H-1313A	(b) (9)	(b) (9)	X							
512339141	RAZOR FEDERAL 12H-1314B	(b) (9)	(b) (9)	X							
51233914201	RAZOR FEDERAL 12H-1315A	(b) (9)	(b) (9)	X							
512339149	RAZOR FEDERAL 12H-1316B	(b) (9)	(b) (9)	X							
3305307420	ROLLA FEDERAL 11-3-1TFHU	(b) (9)	(b) (9)	X							
3305307419	ROLLA FEDERAL 11-3-2TFH	(b) (9)	(b) (9)	X							
3305307152	ROLLA FEDERAL 31-3-1H	(b) (9)	(b) (9)	X							
3305307148	ROLLA FEDERAL 31-3-1TFH	(b) (9)	(b) (9)	X							
3305307149	ROLLA FEDERAL 31-3-2TFH	(b) (9)	(b) (9)	X							
3305307150	ROLLA FEDERAL 31-3-3TFH	(b) (9)	(b) (9)	X							
3305307151	ROLLA FEDERAL 31-3-4TFH	(b) (9)	(b) (9)	X							
3302502894	SKUNK CREEK 1-24-25-16H3	(b) (9)	(b) (9)	X							
3302501925	SKUNK CREEK 4-10-11-1H	(b) (9)	(b) (9)	X							
3302503036	SKUNK CREEK 4-10-11-1H3	(b) (9)	(b) (9)	X							
3302503037	SKUNK CREEK 4-10-11-8H	(b) (9)	(b) (9)	X							
3302501192	SKUNK CREEK 4-10-11-8H3	(b) (9)	(b) (9)	X							
3305306856	SMOKEY 2-16-21-15H3	(b) (9)	(b) (9)	X							
3305306859	SMOKEY 2-16-21-16H	(b) (9)	(b) (9)	X							
3305306858	SMOKEY 2-16-21-16H3	(b) (9)	(b) (9)	X							
3305306857	SMOKEY 2-16-21-16HA	(b) (9)	(b) (9)	X							
3305306869	SMOKEY 2-16-21-16HU3	(b) (9)	(b) (9)	X							
4304754984	STATE 28-13	(b) (9)	(b) (9)	X							
3310504263	STATE 34-36-1H	(b) (9)	(b) (9)	X							
3310504262	STATE 34-36-1TFH	(b) (9)	(b) (9)	X							
3310504265	STATE 34-36-2H	(b) (9)	(b) (9)	X							
3310504264	STATE 34-36-2TFH	(b) (9)	(b) (9)	X							
3302502891	TWO SHIELDS BUTTE 1-24-12-1H	(b) (9)	(b) (9)	X							
3302500934	TWO SHIELDS BUTTE 14-33-6H	(b) (9)	(b) (9)	X							
3305307680	WOLD 16-7TFH	(b) (9)	(b) (9)	X							
	3J TRUST 34-8PH	(b) (9)	(b) (9)							X	
	BUCKMAN 34-9PH	(b) (9)	(b) (9)							X	
	CARSCALLEN 14C	(b) (9)	(b) (9)							X	
	CHAMELEON STATE 16B-1	(b) (9)	(b) (9)							X	
	CHAMELEON STATE 16D	(b) (9)	(b) (9)							X	
	CHARGING EAGLE 19I	(b) (9)	(b) (9)							X	
	CHARGING EAGLE 25C	(b) (9)	(b) (9)							X	
	CORNABEAN 36O	(b) (9)	(b) (9)							X	

List of Affected Facilities - NSPS Subpart OOOOa

§60.5420a(b)(1)(i) and (ii)

US Well ID / API Number	Facility/Well Name	Site Location		Affected Facility Type(s) (Place an 'X' in Every Column That Applies)							
		Lat.	Long.	Well Completion	Storage Vessel	Reciprocating Compressor	Centrifugal Compressor	Pneumatic Controller	Pneumatic Pump	Well Site Fugitives	Compressor Station Fugitives
	DORE 3-10X	(b) (9)	(b) (9)							X	
	EVITT 12O	(b) (9)	(b) (9)							X	
	FLATLAND 9I	(b) (9)	(b) (9)							X	
	FLATLAND FEDERAL 11-4 CTB	(b) (9)	(b) (9)							X	
	FRANK 34-7TFH	(b) (9)	(b) (9)							X	
	FROELICH 21-28PH	(b) (9)	(b) (9)							X	
	GULLIKSON 34P	(b) (9)	(b) (9)							X	
	HANSEN 21-3TFH	(b) (9)	(b) (9)							X	
	HECKER 21-18TFH	(b) (9)	(b) (9)							X	
	Horsetail 07 CPB West	(b) (9)	(b) (9)						X	X	
	HORSETAIL 29G	(b) (9)	(b) (9)								
	[REDACTED]	(b) (9)	(b) (9)							X	
	K WOLD 153-97-1-5	(b) (9)	(b) (9)							X	
	KOALA 31P	(b) (9)	(b) (9)							X	
	KOALA 32M	(b) (9)	(b) (9)							X	
	KOALA 5P	(b) (9)	(b) (9)								
	[REDACTED]	(b) (9)	(b) (9)							X	
	LOOMER 33P	(b) (9)	(b) (9)							X	
	LUKENBILL 11O	(b) (9)	(b) (9)							X	
	Moccasin Creek 26H	(b) (9)	(b) (9)							X	
	NIEMI 44-22H	(b) (9)	(b) (9)							X	
	NORTHERN 30B	(b) (9)	(b) (9)							X	
	OBRIGEWITCH 21-16TFH	(b) (9)	(b) (9)								
	[REDACTED]	(b) (9)	(b) (9)							X	
	Obrigewitch 29A	(b) (9)	(b) (9)							X	
	OBRIGEWITCH 29D	(b) (9)	(b) (9)							X	
	P BERGER 7N	(b) (9)	(b) (9)							X	
	P BIBLER 31N	(b) (9)	(b) (9)							X	
	P BIBLER 31P	(b) (9)	(b) (9)							X	
	P BIBLER 5C	(b) (9)	(b) (9)							X	
	P EARL RENNERFELDT 3B	(b) (9)	(b) (9)							X	
	P EVITT 154-98-13	(b) (9)	(b) (9)							X	
	P LYNCH 33N	(b) (9)	(b) (9)							X	
	P PANKOWSKI 6D	(b) (9)	(b) (9)							X	
	RAZOR 08E	(b) (9)	(b) (9)							X	
	RAZOR 12F	(b) (9)	(b) (9)						X	X	
	RAZOR 29F	(b) (9)	(b) (9)							X	

List of Affected Facilities - NSPS Subpart OOOOa

§60.5420a(b)(1)(i) and (ii)

US Well ID / API Number	Facility/Well Name	Site Location		Affected Facility Type(s) <i>(Place an 'X' in Every Column That Applies)</i>							
		Lat.	Long.	Well Completion	Storage Vessel	Reciprocating Compressor	Centrifugal Compressor	Pneumatic Controller	Pneumatic Pump	Well Site Fugitives	Compressor Station Fugitives
	RAZOR 30K	(b) (9)	(b) (9)						X	X	
	ROLLA FEDERAL 3B	(b) (9)	(b) (9)							X	
	ROLLA FEDERAL 3C	(b) (9)	(b) (9)							X	
	ROLLA FEDERAL 3D	(b) (9)	(b) (9)							X	
	SC-TSB 2-24	(b) (9)	(b) (9)							X	
	SKUNK CREEK 4-18-17	(b) (9)	(b) (9)							X	
	SMOKEY 2-16-21	(b) (9)	(b) (9)							X	
	TSB 14-33	(b) (9)	(b) (9)							X	
	WOLD 7P	(b) (9)	(b) (9)							X	
	Horsetail 07 CPB East	(b) (9)	(b) (9)						X		
	Horsetail 30	(b) (9)	(b) (9)						X		
	Razor 12H	(b) (9)	(b) (9)						X		
	Stanley Booster Station	(b) (9)	(b) (9)			X					

Well Affected Facilities - NSPS Subpart OOOOa

§60.5420a(b)(2)

US Well ID / API Number	Well Name	Lat. (Nad 83)	Long. (Nad 83)	Date/Time of Onset of Flowback following HF or Refracturing	Date/Time of 1st Attempt to Direct Flowback to Separator	Date/Time of 1st Return to Initial Flowback Stage	Date/Time of 2nd Attempt to Direct Flowback to Separator	Date/Time of 2nd Return to Initial Flowback Stage	Date/Time of 3rd Attempt to Direct Flowback to Separator	Date/Time of 3rd Return to Initial Flowback Stage	Date/Time Well was Shut-in and Flowback Equipment Disconnected	Date and Time of Production Startup	Durations of: (hrs)				Disposition of Recovery	Reason for Venting	Claiming Technical Infeasibility? (If yes, attach Technical Infeasibility documentation.)	Deviations To Report? (If yes, put an 'X'. If not, leave blank.)
													Flowback	Recovery	Combustion	Venting				
4304754984	STATE 28-13	(b) (9)	(b) (9)	8/10/16 20:34	8/10/16 20:34							9/12/16 0:00	771.43	771.43			Sales line*	N/A	No	
3305307420	ROLLA FEDERAL 11-3-1TFHU	(b) (9)	(b) (9)	8/13/16 0:00	8/13/16 0:00							9/14/16 0:00	768.00	744.00	24.00		Sales line*	N/A	No	
3305307419	ROLLA FEDERAL 11-3-2TFH	(b) (9)	(b) (9)	8/13/16 0:00	8/13/16 0:00							9/22/16 0:00	960.00	936.00	24.00		Sales line*	N/A	No	
3305307148	ROLLA FEDERAL 31-3-1TFH	(b) (9)	(b) (9)	8/19/16 18:00	8/19/16 18:00							9/7/16 0:00	438.00	414.00	24.00		Sales line*	N/A	No	
3305307149	ROLLA FEDERAL 31-3-2TFH	(b) (9)	(b) (9)	8/19/16 18:00	8/19/16 18:00							9/26/16 0:00	894.00	870.00	24.00		Sales line*	N/A	No	
3305307151	ROLLA FEDERAL 31-3-4TFH	(b) (9)	(b) (9)	8/31/16 8:04	8/31/16 8:04							9/14/16 0:00	327.93	303.93	24.00		Sales line*	N/A	No	
3305307152	ROLLA FEDERAL 31-3-1H	(b) (9)	(b) (9)	8/31/16 20:06	8/31/16 20:06							9/8/16 0:00	171.90	147.90	24.00		Sales line*	N/A	No	
3305307150	ROLLA FEDERAL 31-3-3TFH	(b) (9)	(b) (9)	8/31/16 20:06	8/31/16 20:06							9/20/16 0:00	459.90	435.90	24.00		Sales line*	N/A	No	
3308900880	FRANK 24-7PH	(b) (9)	(b) (9)	9/2/16 0:00	9/2/16 0:00							9/15/16 0:00	312.00	312.00			Sales line*	N/A	No	
3308900879	HECKER 11-18-2PH	(b) (9)	(b) (9)	9/2/16 0:00	9/2/16 0:00							10/13/16 0:00	984.00	984.00			Sales line*	N/A	No	
3308900886	FRANK 34-7-2PH	(b) (9)	(b) (9)	9/4/16 0:00	9/4/16 0:00							9/19/16 3:00	363.00	363.00			Sales line*	N/A	No	
3308900887	FRANK 44-7PHU	(b) (9)	(b) (9)	9/4/16 0:00	9/4/16 0:00							9/23/16 13:00	469.00	469.00			Sales line*	N/A	No	
3305307531	FLATLAND 43-9-1XH	(b) (9)	(b) (9)	9/16/16 1:58	9/16/16 1:58							10/11/16 0:00	598.03	574.03	24.00		Sales line*	N/A	No	
3305307530	FLATLAND 43-9-1H	(b) (9)	(b) (9)	9/17/16 9:30	9/17/16 9:30							10/8/16 0:00	494.50	470.50	24.00		Sales line*	N/A	No	
3305307649	CHAMELEON STATE 31-16HU	(b) (9)	(b) (9)	9/29/16 0:00	9/29/16 0:00							10/10/16 0:00	264.00	264.00			Sales line*	N/A	No	
3305306884	CHAMELEON STATE 31-16-1H	(b) (9)	(b) (9)	10/1/16 0:00	10/1/16 0:00							10/13/16 0:00	288.00	288.00			Sales line*	N/A	No	
3305307529	FLATLAND 43-9-2H	(b) (9)	(b) (9)	10/2/16 14:05	10/2/16 14:05							10/8/16 0:00	129.92	37.67	92.25		Sales line*	N/A	No	
3305307528	FLATLAND 43-9HU	(b) (9)	(b) (9)	10/2/16 18:38	10/2/16 18:38							10/12/16 0:00	221.37	197.37	24.00		Sales line*	N/A	No	
3305307680	WOLD 16-7TFH	(b) (9)	(b) (9)	10/15/16 19:43	10/15/16 19:43							10/18/16 0:00	52.28	52.28			Sales line*	N/A	No	
3302500934	TWO SHIELDS BUTTE 14-33-6H	(b) (9)	(b) (9)	10/21/16 0:00	10/21/16 0:00							10/28/16 0:00	168.00	167.80	0.20		Sales line*	N/A	No	
3305307015	KOALA 44-5TFHU	(b) (9)	(b) (9)	11/1/16 0:32	11/1/16 0:32							11/4/16 0:00	71.47	71.47			Sales line*	N/A	No	
3305306883	KOALA 44-5-3H	(b) (9)	(b) (9)	11/2/16 12:34	11/2/16 12:34							11/4/16 0:00	35.43	35.43			Sales line*	N/A	No	
3305306881	KOALA 44-5-2H	(b) (9)	(b) (9)	11/2/16 15:35	11/2/16 15:35							11/4/16 0:00	32.42	32.42			Sales line*	N/A	No	
3305307308	KOALA 14-32-2H	(b) (9)	(b) (9)	11/9/16 0:00	11/9/16 0:00							12/2/16 0:00	552.00	530.00	19.00	3.00	Sales line*	See attached Technically Infeasible Checklist	Yes	
3302502649	MOCCASIN CREEK 8-26-27-5H3	(b) (9)	(b) (9)	11/9/16 0:00	11/9/16 0:00							12/13/16 2:30	818.50	788.00	30.50		Sales line*	N/A	No	
3305307309	KOALA 14-32HU	(b) (9)	(b) (9)	11/10/16 0:00	11/10/16 0:00							12/9/16 0:00	696.00	586.00	110.00		Sales line*	N/A	No	
3302502651	MOCCASIN CREEK 8-26-27-4H3	(b) (9)	(b) (9)	11/10/16 0:00	11/10/16 0:00							12/18/16 11:30	923.50	923.50			Sales line*	N/A	No	
3305307409	KOALA 44-31-2TFH	(b) (9)	(b) (9)	11/15/16 21:58	11/15/16 21:58							12/10/16 0:00	578.03	578.03			Sales line*	N/A	No	
3305307404	KOALA 44-31H	(b) (9)	(b) (9)	11/16/16 1:02	11/16/16 1:02							12/22/16 0:00	862.97	862.97			Sales line*	N/A	No	
3302502648	MOCCASIN CREEK 8-26-27-5H	(b) (9)	(b) (9)	11/23/16 0:00	11/23/16 0:00							12/11/16 0:00	432.00	432.00			Sales line*	N/A	No	
3302502650	MOCCASIN CREEK 8-26-27-4H	(b) (9)	(b) (9)	11/24/16 0:00	11/24/16 0:00							12/15/16 15:30	519.50	519.50			Sales line*	N/A	No	
3305307403	KOALA 44-31-3TFH	(b) (9)	(b) (9)	11/25/16 3:35	11/25/16 3:35							1/9/17 0:00	1076.42	1076.42			Sales line*	N/A	No	
3305307402	KOALA 44-31TFH	(b) (9)	(b) (9)																	
		(b) (9)	(b) (9)	12/22/16 8:41	12/22/16 8:41							3/23/17 9:00	2184.32	2177.57	6.75		Sales line*	N/A	Yes	
3305306869	SMOKEY 2-16-21-16HU3	(b) (9)	(b) (9)	12/22/16 15:33	12/22/16 15:33							2/27/17 0:00	1592.45	1592.45			Sales line*	N/A	No	
3305306856	SMOKEY 2-16-21-15H3	(b) (9)	(b) (9)	12/23/16 0:25	12/23/16 0:25							2/17/17 0:00	1343.58	1331.38	12.20		Sales line*	N/A	No	
3302502894	SKUNK CREEK 1-24-25-16H3	(b) (9)	(b) (9)	12/29/16 0:00	12/29/16 0:00							1/9/17 4:00	268.00	268.00			Sales line*	N/A	No	
3302502891	TWO SHIELDS BUTTE 1-24-12-1H	(b) (9)	(b) (9)	12/29/16 0:00	12/29/16 0:00							1/6/17 20:00	212.00	212.00			Sales line*	N/A	No	
512338542	RAZOR FEDERAL 12G-1310B	(b) (9)	(b) (9)	1/17/17 4:34	1/17/17 4:34							5/30/17 19:00	3206.43	3206.43			Sales line*	N/A	No	
51233854100	RAZOR 12G-0110B	(b) (9)	(b) (9)	1/17/17 9:01	1/17/17 9:01							7/29/17 0:00	4622.98	4622.98			Sales line*	N/A	No	
512338545	RAZOR 12G-0109A	(b) (9)	(b) (9)	1/25/17 17:35	1/25/17 17:35							6/8/17 0:00	3198.42	3198.42			Sales line*	N/A	No	
512338544	RAZOR FEDERAL 12G-1309A	(b) (9)	(b) (9)	1/25/17 21:37	1/25/17 21:37							5/30/17 19:00	2997.38	2997.38			Sales line*	N/A	No	
3305306908	LOOMER 44-33-2H	(b) (9)	(b) (9)	1/28/17 0:00	1/28/17 0:00							2/9/17 0:00	288.00	266.60	21.40		Sales line*	N/A	Yes	
3305306907	LOOMER 44-33-2TFH	(b) (9)	(b) (9)	1/28/17 0:00	1/28/17 0:00							2/14/17 0:00	408.00	396.00	12.00		Sales line*	N/A	Yes	
3305306909	LOOMER 44-33TFHU	(b) (9)	(b) (9)	1/28/17 0:00	1/28/17 0:00							2/3/17 0:00	144.00	134.00	10.00		Sales line*	N/A	Yes	
512338547	RAZOR FEDERAL 12G-1312B	(b) (9)	(b) (9)	2/4/17 17:33	2/4/17 17:33							6/11/17 0:00	3030.45	3030.45			Sales line*	N/A	No	
512336949	RAZOR 12G-0112B	(b) (9)	(b) (9)	2/4/17 19:19	2/4/17 19:19							6/9/17 0:00	2980.68	2980.68			Sales line*	N/A	No	
51233854601	RAZOR FEDERAL 12G-1311A	(b) (9)	(b) (9)	2/11/17 18:37	2/11/17 18:37							6/3/17 6:00	2675.38	2675.38			Sales line*	N/A	No	
512338543	RAZOR 12G-0111A	(b) (9)	(b) (9)	2/11/17 22:24	2/11/17 22:24							6/7/17 0:00	2761.60	2761.60			Sales line*	N/A	No	
3305306859	SMOKEY 2-16-21-16H	(b) (9)	(b) (9)	2/13/17 9:02	2/13/17 9:02							3/30/17 12:00	1082.97	1081.97	1.00		Sales line*	N/A	Yes	
3305306857	SMOKEY 2-16-21-16HA	(b) (9)	(b) (9)	2/14/17 6:00	2/14/17 6:00							3/13/17 0:00	642.00	629.60	12.40		Sales line*	N/A	Yes	
512339154	RAZOR 12H-0115A	(b) (9)	(b) (9)	2/22/17 6:28	2/22/17 6:28							6/23/17 0:00	2897.53	2897.53			Sales line*	N/A	No	
512339141	RAZOR FEDERAL 12H-1314B	(b) (9)	(b) (9)	2/22/17 18:45	2/22/17 18:45							6/23/17 0:00	2885.25	2885.25			Sales line*	N/A	No	
3310504262	STATE 34-36-1TFH	(b) (9)	(b) (9)	3/3/17 0:00	3/3/17 0:00							3/10/17 16:00	184.00	162.00	22.00		Sales line*	N/A	Yes	
3310504264	STATE 34-36-2TFH	(b) (9)	(b) (9)	3/3/17 0:00	3/3/17 0:00							3/16/17 16:00	328.00	328.00			Sales line*	N/A	No	
3310504265	STATE 34-36-2H	(b) (9)	(b) (9)	3/6/17 0:00	3/6/17 0:00							3/18/17 18:00	306.00	288.00	18.00		Sales line*	N/A	Yes	
3310504263	STATE 34-36-1H	(b) (9)	(b) (9)	3/7/17 0:00	3/7/17 0:00							3/13/17 8:00	152.00	152.00			Sales line*	N/A	No	
512339147	RAZOR FEDERAL 12H-1313A	(b) (9)	(b) (9)	3/7/17 1:42	3/7/17 1:42							6/22/17 0:00	2566.30	2566.30			Sales line*	N/A	No	

*Except for periods when venting or flaring duration is indicated. See the attached Technically Infeasible Checklists for more information.

Well Affected Facilities - NSPS Subpart OOOOa

§60.5420a(b)(2)

US Well ID / API Number	Well Name	Lat. (Nad 83)	Long. (Nad 83)	Date/Time of Onset of Flowback following HF or Refracturing	Date/Time of 1st Attempt to Direct Flowback to Separator	Date/Time of 1st Return to Initial Flowback Stage	Date/Time of 2nd Attempt to Direct Flowback to Separator	Date/Time of 2nd Return to Initial Flowback Stage	Date/Time of 3rd Attempt to Direct Flowback to Separator	Date/Time of 3rd Return to Initial Flowback Stage	Date/Time Well was Shut-in and Flowback Equipment Disconnected	Date and Time of Production Startup	Durations of: (hrs)				Disposition of Recovery	Reason for Venting	Claiming Technical Infeasibility? (If yes, attach Technical Infeasibility documentation.)	Deviations To Report? (If yes, put an 'X'. If not, leave blank.)
													Flowback	Recovery	Combustion	Venting				
51233915200	RAZOR 12H-0113A	(b) (9)	(b) (9)	3/10/17 17:05	3/10/17 17:05							6/22/17 0:00	2478.92	2478.92			Sales line*	N/A	No	
3310504268	LUKENBILL 34-11-2TFH	(b) (9)	(b) (9)	3/19/17 19:02	3/19/17 19:02							4/9/17 12:00	496.97	496.97			Sales line*	N/A	No	
3310504269	LUKENBILL 34-11-1TFH	(b) (9)	(b) (9)	3/20/17 2:17	3/20/17 2:17							4/6/17 14:00	419.72	419.72			Sales line*	N/A	No	
51233914600	RAZOR 12H-0116B	(b) (9)	(b) (9)	3/21/17 16:58	3/21/17 16:58							7/3/17 0:00	2479.03	2432.99	46.00	0.04	Sales line*	See attached Technically Infeasible Checklist	Yes	
3308900881	3J TRUST 24-8-2PH	(b) (9)	(b) (9)	3/22/17 0:00	3/22/17 0:00							6/3/17 7:00	1759.00	1759.00			Sales line*	N/A	No	
512339149	RAZOR FEDERAL 12H-1316B	(b) (9)	(b) (9)	3/22/17 23:58	3/22/17 23:58							7/3/17 0:00	2448.03	2400.98	47.00	0.05	Sales line*	See attached Technically Infeasible Checklist	Yes	
51233914201	RAZOR FEDERAL 12H-1315A	(b) (9)	(b) (9)	3/24/17 11:23	3/24/17 11:23							6/27/17 0:00	2268.62	2253.62	15.00		Sales line*	N/A	Yes	
3310504270	LUKENBILL 34-11-1H	(b) (9)	(b) (9)	3/27/17 18:39	3/27/17 18:39							4/3/17 23:00	172.35	158.35	14.00		Sales line*	N/A	Yes	
3310504267	LUKENBILL 34-11-2H	(b) (9)	(b) (9)	3/27/17 22:38	3/27/17 22:38							4/12/17 4:00	365.37	354.87	10.50		Sales line*	N/A	Yes	
512341643	HORSETAIL 07E-1802	(b) (9)	(b) (9)																	
		(b) (9)	(b) (9)	3/30/17 20:41	3/30/17 20:41							7/21/17 0:00	2691.32	2691.32			Sales line*	N/A	No	
3310504303	NORTHERN 31-30-2TFH	(b) (9)	(b) (9)	4/1/17 0:00	4/1/17 0:00							4/19/17 1:00	433.00	433.00			Sales line*	N/A	No	
3310504302	NORTHERN 31-30-1TFH	(b) (9)	(b) (9)	4/2/17 0:00	4/2/17 0:00							4/22/17 0:00	480.00	480.00			Sales line*	N/A	No	
3308900882	3J TRUST 34-8-2PH	(b) (9)	(b) (9)	4/3/17 2:59	4/3/17 2:59							5/14/17 18:00	999.02	846.00	153.00	0.02	Sales line*	See attached Technically Infeasible Checklist	Yes	
512341650	HORSETAIL 07E-0634	(b) (9)	(b) (9)	4/5/17 2:25	4/5/17 2:25							7/26/17 0:00	2685.58	2685.58			Sales line*	N/A	No	
512341642	HORSETAIL 07E-1834	(b) (9)	(b) (9)	4/5/17 12:31	4/5/17 12:31							7/23/17 0:00	2603.48	2603.48			Sales line*	N/A	No	
512341646	HORSETAIL 07E-1836	(b) (9)	(b) (9)	4/9/17 16:43	4/9/17 16:43							8/7/17 0:00	2863.28	2863.28			Sales line*	N/A	No	
3310504301	NORTHERN 31-30-1H	(b) (9)	(b) (9)	4/10/17 0:00	4/10/17 0:00							4/25/17 0:00	360.00	360.00			Sales line*	N/A	No	
3310504304	NORTHERN 31-30-2H	(b) (9)	(b) (9)	4/10/17 0:00	4/10/17 0:00							4/16/17 12:00	156.00	156.00			Sales line*	N/A	No	
512341648	HORSETAIL 07E-0636	(b) (9)	(b) (9)	4/10/17 7:17	4/10/17 7:17							8/7/17 0:00	2848.72	2848.72			Sales line*	N/A	No	
512341645	HORSETAIL 07E-1804	(b) (9)	(b) (9)	4/15/17 15:02	4/15/17 15:02							8/7/17 8:00	2728.97	2728.97			Sales line*	N/A	No	
512341652	HORSETAIL 07E-0604	(b) (9)	(b) (9)	4/15/17 16:41	4/15/17 16:41							8/7/17 0:00	2719.32	2719.32			Sales line*	N/A	No	
3310504339	EVITT 14-12-4TFHX	(b) (9)	(b) (9)	4/17/17 18:09	4/17/17 18:09							6/7/17 8:00	1213.85	1106.60	107.25		Sales line*	N/A	Yes	
3310504074	EVITT 14-12TFH	(b) (9)	(b) (9)	4/17/17 21:05	4/17/17 21:05							5/31/17 12:00	1046.92	933.92	113.00		Sales line*	N/A	Yes	
3310504072	EVITT 14-12H	(b) (9)	(b) (9)	4/18/17 22:37	4/18/17 22:37							5/26/17 18:00	907.38	822.00	85.38		Sales line*	N/A	Yes	
512341644	HORSETAIL 07E-1803	(b) (9)	(b) (9)	4/20/17 16:41	4/20/17 16:41							7/25/17 0:00	2287.32	2287.32			Sales line*	N/A	No	
51234164901	HORSETAIL 07E-0603	(b) (9)	(b) (9)	4/20/17 18:31	4/20/17 18:31							8/7/17 0:00	2597.48	2597.48			Sales line*	N/A	No	
3308900869	OBRIGEWITCH 44-8PHU	(b) (9)	(b) (9)	4/23/17 0:00	4/23/17 0:00							5/11/17 4:00	436.00	400.00	36.00		Sales line*	N/A	Yes	
3308900893	BUCKMAN 44-9PHU	(b) (9)	(b) (9)	4/25/17 11:18	4/25/17 11:18							6/1/17 18:00	894.70	894.70			Sales line*	N/A	No	
3308900892	BUCKMAN 34-9-2PH	(b) (9)	(b) (9)	4/25/17 23:33	4/25/17 23:33							5/16/17 8:00	488.45	488.45			Sales line*	N/A	No	
512341641	HORSETAIL 07E-1801	(b) (9)	(b) (9)	4/26/17 13:47	4/26/17 13:47							7/23/17 0:00	2098.22	2098.22			Sales line*	N/A	No	
512341651	HORSETAIL 07E-0601	(b) (9)	(b) (9)	4/29/17 11:01	4/29/17 11:01							7/21/17 0:00	1980.98	1980.98			Sales line*	N/A	No	
512342112	HORSETAIL 07G-1844	(b) (9)	(b) (9)	5/1/17 11:14	5/1/17 11:14							8/19/17 0:00	2628.77	2628.77			Sales line*	N/A	No	
512342109	HORSETAIL FED 07G-0642	(b) (9)	(b) (9)	5/1/17 12:33	5/1/17 12:33							8/20/17 0:00	2651.45	2651.45			Sales line*	N/A	No	
3308900885	OBRIGEWITCH 24-9PH	(b) (9)	(b) (9)	5/3/17 0:00	5/3/17 0:00							5/25/17 8:00	536.00	536.00			Sales line*	N/A	No	
51233880701	HORSETAIL 29G-2043	(b) (9)	(b) (9)	5/7/17 1:43	5/7/17 1:43							6/11/17 0:00	838.28	819.28	19.00		Sales line*	N/A	Yes	
3310504161	EVITT 34-12TFH	(b) (9)	(b) (9)	5/7/17 7:32	5/7/17 7:32							6/6/17 2:00	714.47	663.47	51.00		Sales line*	N/A	Yes	
3310504160	EVITT 34-12-2H	(b) (9)	(b) (9)	5/7/17 17:12	5/7/17 17:12							5/27/17 19:00	481.80	442.40	39.40		Sales line*	N/A	Yes	
512342126	HORSETAIL 07G-1810	(b) (9)	(b) (9)	5/9/17 3:00	5/9/17 3:00							8/19/17 0:00	2445.00	2445.00			Sales line*	N/A	No	
512342110	HORSETAIL FED 07G-0643	(b) (9)	(b) (9)	5/9/17 4:29	5/9/17 4:29							8/19/17 0:00	2443.52	2443.52			Sales line*	N/A	No	
3308900891	BUCKMAN 34-21PH	(b) (9)	(b) (9)	5/11/17 16:37	5/11/17 16:37							6/1/17 23:00	510.38	510.38			Sales line*	N/A	No	
3308900890	BUCKMAN 24-21PH	(b) (9)	(b) (9)	5/11/17 19:10	5/11/17 19:10							7/14/17 0:00	1516.83	1516.83			Sales line*	N/A	No	
3308900872	PRIVRATSKY 44-21PHU	(b) (9)	(b) (9)	5/16/17 0:00	5/16/17 0:00							6/30/17 0:00	1080.00	1080.00			Sales line*	N/A	No	
512342121	HORSETAIL 07G-1812	(b) (9)	(b) (9)	5/16/17 4:14	5/16/17 4:14							8/19/17 0:00	2275.77	2275.77			Sales line*	N/A	No	
512342114	HORSETAIL 07G-0610	(b) (9)	(b) (9)	5/16/17 5:29	5/16/17 5:29							8/19/17 0:00	2274.52	2274.52			Sales line*	N/A	No	
512341781	HORSETAIL 07F-1838	(b) (9)	(b) (9)	5/16/17 10:44	5/16/17 10:44							8/10/17 0:00	2053.27	2053.27			Sales line*	N/A	No	
51234178301	HORSETAIL FED 07F-0639	(b) (9)	(b) (9)	5/16/17 15:27	5/16/17 15:27							8/10/17 0:00	2048.55	2048.55			Sales line*	N/A	No	
512341773	HORSETAIL FED 07F-0640	(b) (9)	(b) (9)	5/23/17 7:51	5/23/17 7:51							8/10/17 0:00	1888.15	1888.15			Sales line*	N/A	No	
512341771	HORSETAIL 07F-1839	(b) (9)	(b) (9)	5/23/17 9:24	5/23/17 9:24							8/9/17 0:00	1862.60	1862.60			Sales line*	N/A	No	
512342116	HORSETAIL FED 07G-0612	(b) (9)	(b) (9)	5/23/17 21:36	5/23/17 21:36							8/19/17 0:00	2090.40	2090.40			Sales line*	N/A	No	
512342111	HORSETAIL 07G-0609	(b) (9)	(b) (9)	5/23/17 22:47	5/23/17 22:47							8/19/17 0:00	2089.22	2089.22			Sales line*	N/A	No	
3310504162	EVITT 34-12H	(b) (9)	(b) (9)	5/25/17 22:00	5/25/17 22:00							6/9/17 3:00	341.00	250.00	91.00		Sales line*	N/A	Yes	
3308900871	PRIVRATSKY 41-28PHU	(b) (9)	(b) (9)	5/29/17 0:00	5/29/17 0:00							7/8/17 9:00	969.00	969.00			Sales line*	N/A	No	
512341769	HORSETAIL 07F-1806	(b) (9)	(b) (9)	5/29/17 15:43	5/29/17 15:43							8/10/17 0:00	1736.28	1736.28			Sales line*	N/A	No	
512341772	HORSETAIL FED 07F-0606	(b) (9)	(b) (9)	5/29/17 16:55	5/29/17 16:55							8/17/17 0:00	1903.08	1903.08			Sales line*	N/A	No	
512342118	HORSETAIL 07G-1809	(b) (9)	(b) (9)	5/30/17 3:23	5/30/17 3:23							8/19/17 0:00	1940.62	1940.62			Sales line*	N/A	No	
512342117	HORSETAIL FED 07G-0611	(b) (9)	(b) (9)	5/30/17 4:28	5/30/17 4:28							8/19/17 0:00	1939.53	1939.53			Sales line*	N/A	No	
3308900888	FROEHLICH 21-28-2PH	(b) (9)	(b) (9)	6/1/17 0:43	6/1/17 0:43							6/17/17 0:00	383.28	383.28			Sales line*	N/A	No	

*Except for periods when venting or flaring duration is indicated. See the attached Technically Infeasible Checklists for more information.

Well Affected Facilities - NSPS Subpart OOOOa

§60.5420a(b)(2)

US Well ID / API Number	Well Name	Lat. (Nad 83)	Long. (Nad 83)	Date/Time of Onset of Flowback following HF or Refracturing	Date/Time of 1st Attempt to Direct Flowback to Separator	Date/Time of 1st Return to Initial Flowback Stage	Date/Time of 2nd Attempt to Direct Flowback to Separator	Date/Time of 2nd Return to Initial Flowback Stage	Date/Time of 3rd Attempt to Direct Flowback to Separator	Date/Time of 3rd Return to Initial Flowback Stage	Date/Time Well was Shut-in and Flowback Equipment Disconnected	Date and Time of Production Startup	Durations of: (hrs)				Disposition of Recovery	Reason for Venting	Claiming Technical Infeasibility? (If yes, attach Technical Infeasibility documentation.)	Deviations To Report? (If yes, put an 'X'. If not, leave blank.)
													Flowback	Recovery	Combustion	Venting				
3308900889	FROEHLICH 31-28PH	(b) (9)	(b) (9)	6/1/17 5:10	6/1/17 5:10							6/19/17 20:00	446.83	446.83			Sales line*	N/A	No	
3305305053	KOALA WOLD 153-97-1-5-29-2H	(b) (9)	(b) (9)	6/4/17 0:00	6/4/17 0:00							6/11/17 0:00	168.00	168.00			Sales line*	N/A	No	
512342115	HORSETAIL 07G-1811	(b) (9)	(b) (9)	6/4/17 7:27	6/4/17 7:27							8/19/17 0:00	1816.55	1816.55			Sales line*	N/A	No	
512341770	HORSETAIL 07F-0608	(b) (9)	(b) (9)	6/5/17 6:32	6/5/17 6:32							8/10/17 0:00	1577.47	1577.47			Sales line*	N/A	No	
512341779	HORSETAIL 07F-1808	(b) (9)	(b) (9)	6/5/17 17:59	6/5/17 17:59							8/10/17 0:00	1566.02	1566.02			Sales line*	N/A	No	
3305301642	DORE 3-10X	(b) (9)	(b) (9)	6/6/17 0:00	6/6/17 0:00							6/24/17 0:00	432.00	432.00			Sales line*	N/A	No	
3305303474	KOALA 2-25-36-14H3	(b) (9)	(b) (9)	6/8/17 0:00	6/8/17 0:00							8/9/17 0:00	1488.00	1488.00			Sales line*	N/A	No	
3302501925	SKUNK CREEK 4-10-11-1H	(b) (9)	(b) (9)	6/10/17 11:33	6/10/17 11:33							6/26/17 23:00	395.45	323.45	72.00		Sales line*	N/A	Yes	
3302503037	SKUNK CREEK 4-10-11-8H	(b) (9)	(b) (9)	6/10/17 14:15	6/10/17 14:15							6/23/17 6:00	303.75	278.75	25.00		Sales line*	N/A	Yes	
512341774	HORSETAIL 07F-1805	(b) (9)	(b) (9)	6/12/17 13:59	6/12/17 13:59							8/10/17 0:00	1402.02	1402.02			Sales line*	N/A	No	
512341830	HORSETAIL 07H-1847	(b) (9)	(b) (9)	6/12/17 19:16	6/12/17 19:16							8/30/17 12:00	1888.73	1888.73			Sales line*	N/A	No	
512341829	HORSETAIL 07H-0647	(b) (9)	(b) (9)	6/12/17 20:34	6/12/17 20:34							8/30/17 19:00	1894.43	1894.43			Sales line*	N/A	No	
3306100844	HANSEN 21-3TFH	(b) (9)	(b) (9)	6/13/17 0:00	6/13/17 0:00							6/16/17 0:00	72.00	72.00			Sales line*	N/A	No	
512341768	HORSETAIL FED 07F-0605	(b) (9)	(b) (9)	6/13/17 2:30	6/13/17 2:30							8/10/17 0:00	1389.50	1389.50			Sales line*	N/A	No	
512341778	HORSETAIL 07F-0607	(b) (9)	(b) (9)	6/19/17 14:43	6/19/17 14:43							8/10/17 0:00	1233.28	1233.28			Sales line*	N/A	No	
512341782	HORSETAIL 07F-1807	(b) (9)	(b) (9)	6/19/17 19:34	6/19/17 19:34							8/9/17 23:00	1227.43	1227.43			Sales line*	N/A	No	
512341834	HORSETAIL 07H-0646	(b) (9)	(b) (9)	6/19/17 21:32	6/19/17 21:32							8/30/17 20:00	1726.47	1726.47			Sales line*	N/A	No	
512341839	HORSETAIL 07H-1846	(b) (9)	(b) (9)	6/19/17 22:41	6/19/17 22:41							8/30/17 11:00	1716.32	1716.32			Sales line*	N/A	No	
3302503036	SKUNK CREEK 4-10-11-1H3	(b) (9)	(b) (9)	6/20/17 12:19	6/20/17 12:19							6/28/17 23:00	202.68	77.08	125.60		Sales line*	N/A	Yes	
3302501192	SKUNK CREEK 4-10-11-8H3	(b) (9)	(b) (9)	6/20/17 21:21	6/20/17 21:21							6/24/17 16:00	90.65	3.65	87.00		Sales line*	N/A	Yes	
3306103848	FLADELAND 13-27H	(b) (9)	(b) (9)	6/21/17 0:00	6/21/17 0:00							7/29/17 0:00	912.00	912.00			Sales line*	N/A	No	
512343043	HORSETAIL 07H-0615	(b) (9)	(b) (9)	6/27/17 3:00	6/27/17 3:00							8/30/17 19:00	1552.00	1552.00			Sales line*	N/A	No	
512341841	HORSETAIL 07H-1814	(b) (9)	(b) (9)	6/27/17 5:37	6/27/17 5:37							8/30/17 12:00	1542.38	1542.38			Sales line*	N/A	No	
512341831	HORSETAIL 07H-1815	(b) (9)	(b) (9)	6/28/17 16:32	6/28/17 16:32							8/30/17 0:00	1495.47	1495.47			Sales line*	N/A	No	
512341445	HORSETAIL 08D-1734	(b) (9)	(b) (9)	6/30/17 3:43	6/30/17 3:43							8/31/17 0:00	1484.28	1484.28			Sales line*	N/A	No	
512341446	HORSETAIL 08D-1735	(b) (9)	(b) (9)	6/30/17 5:01	6/30/17 5:01							9/1/17 17:00	1523.98	1523.98			Sales line*	N/A	No	
3305307516	KOALA FEDERAL 31-25HU	(b) (9)	(b) (9)	6/30/17 11:00	6/30/17 11:00							8/1/17 23:00	780.00	658.25	121.75		Sales line*	N/A	Yes	
3305307519	KOALA 31-25-2TFH	(b) (9)	(b) (9)	7/1/17 1:47	7/1/17 1:47							7/26/17 8:00	606.22	498.22	108.00		Sales line*	N/A	Yes	
3305307517	KOALA FEDERAL 31-25TFH	(b) (9)	(b) (9)	7/2/17 7:58	7/2/17 7:58							8/13/17 23:00	1023.03	993.03	30.00		Sales line*	N/A	Yes	
3306103830	LIFFRIG 11-27-2H	(b) (9)	(b) (9)	7/2/17 15:22	7/2/17 15:22							7/19/17 0:00	392.63	382.63	10.00		Sales line*	N/A	Yes	
512341840	HORSETAIL 07H-1816	(b) (9)	(b) (9)	7/4/17 2:04	7/4/17 2:04							8/30/17 14:00	1379.93	1379.93			Sales line*	N/A	No	
3306103807	MCNAMARA 41-26-2XH	(b) (9)	(b) (9)	7/7/17 0:00	7/7/17 0:00							8/13/17 0:00	888.00	888.00			Sales line*	N/A	No	
3306103808	MCNAMARA 41-26H	(b) (9)	(b) (9)	7/7/17 0:00	7/7/17 0:00							8/21/17 0:00	1080.00	1067.00	13.00		Sales line*	N/A	Yes	
512342847	HORSETAIL 08C-1738	(b) (9)	(b) (9)	7/9/17 19:20	7/9/17 19:20							9/12/17 6:00	1546.67	1546.67			Sales line*	N/A	No	
512341836	HORSETAIL 07H-0613	(b) (9)	(b) (9)	7/10/17 13:16	7/10/17 13:16							8/30/17 18:00	1228.73	1228.73			Sales line*	N/A	No	
512341832	HORSETAIL 07H-1813	(b) (9)	(b) (9)																	
		(b) (9)	(b) (9)	7/14/17 22:01	7/14/17 22:01							9/11/17 6:00	1399.98	1399.98			Sales line*	N/A	No	
3306103805	MCNAMARA 42-26-2XH	(b) (9)	(b) (9)	7/15/17 3:13	7/15/17 3:13							8/25/17 0:00	980.78	980.78			Sales line*	N/A	No	
3306103806	MCNAMARA 42-26-3XH	(b) (9)	(b) (9)	7/18/17 0:39	7/18/17 0:39							7/28/17 1:00	240.35	239.77		0.58	Sales line*	See attached Technically Infeasible Checklist	Yes	
3305307518	KOALA FEDERAL 31-25H	(b) (9)	(b) (9)	7/18/17 22:38	7/18/17 22:38							8/10/17 19:00	548.37	481.37	67.00		Sales line*	N/A	Yes	
3305307520	KOALA 31-25-2H	(b) (9)	(b) (9)	7/19/17 2:10	7/19/17 2:10							8/3/17 7:00	364.83	300.83	64.00		Sales line*	N/A	Yes	
3305307521	KOALA 31-25-3H	(b) (9)	(b) (9)	7/19/17 4:40	7/19/17 4:40							8/6/17 16:00	443.33	397.58	45.75		Sales line*	N/A	Yes	
512343935	RAZOR 26I-2346	(b) (9)	(b) (9)	7/20/17 9:19	7/20/17 9:19							7/21/17 0:00	14.68	14.68			Sales line*	N/A	No	
512343931	RAZOR FED 26I-3546	(b) (9)	(b) (9)	7/21/17 19:04	7/21/17 19:04							7/22/17 0:00	4.93	4.93			Sales line*	N/A	No	
3310504309	NELSON 11-18H	(b) (9)	(b) (9)	7/23/17 0:00	7/23/17 0:00							8/23/17 6:00	750.00	719.00	31.00		Sales line*	N/A	Yes	
3310504310	NELSON 11-18TFH	(b) (9)	(b) (9)	7/24/17 0:00	7/24/17 0:00							8/31/17 6:00	918.00	901.00	17.00		Sales line*	N/A	Yes	
512342852	HORSETAIL 08C-1707	(b) (9)	(b) (9)	7/26/17 3:07	7/26/17 3:07							9/15/17 0:00	1220.88	1220.88			Sales line*	N/A	No	
51234285001	HORSETAIL 08C-1708	(b) (9)	(b) (9)	7/26/17 4:38	7/26/17 4:38							9/15/17 0:00	1219.37	1219.37			Sales line*	N/A	No	
51234393	RAZOR 26I-2347	(b) (9)	(b) (9)	7/28/17 10:04	7/28/17 10:04							7/29/17 0:00	13.93	13.93			Sales line*	N/A	No	
51234393201	RAZOR FED 26I-3547	(b) (9)	(b) (9)	7/28/17 12:20	7/28/17 12:20							7/29/17 0:00	11.67	11.67			Sales line*	N/A	No	
3310504315	IRGENS 41-17-1TFH	(b) (9)	(b) (9)	8/4/17 0:00	8/4/17 0:00							8/27/17 0:00	552.00	552.00			Sales line*	N/A	No	
3310504316	IRGENS 41-17-2H	(b) (9)	(b) (9)	8/5/17 0:00	8/5/17 0:00							8/24/17 1:00	457.00	433.70	23.30		Sales line*	N/A	Yes	
3310504314	IRGENS 41-17-1HU	(b) (9)	(b) (9)																	
		(b) (9)	(b) (9)	8/7/17 0:00	8/7/17 0:00							9/9/17 0:00	792.00	792.00			Sales line*	N/A	No	
3310504350	NELSON 11-18TFHU	(b) (9)	(b) (9)	8/8/17 0:00	8/8/17 0:00							9/5/17 0:00	672.00	651.00	21.00		Sales line*	N/A	Yes	
512342594	RAZOR 25M-2434	(b) (9)	(b) (9)	8/8/17 2:18	8/8/17 2:18							8/9/17 0:00	21.70	21.70			Sales line*	N/A	No	
512342598	RAZOR 25M-2402	(b) (9)	(b) (9)	8/8/17 3:38	8/8/17 3:38							8/9/17 0:00	20.37	20.37			Sales line*	N/A	No	
512341448	HORSETAIL 08B-1742	(b) (9)	(b) (9)	8/9/17 15:25	8/9/17 15:25							9/20/17 0:00	992.58	992.58			Sales line*	N/A	No	

*Except for periods when venting or flaring duration is indicated. See the attached Technically Infeasible Checklists for more information.

Well Affected Facilities - NSPS Subpart OOOOa

§60.5420a(b)(2)

US Well ID / API Number	Well Name	Lat. (Nad 83)	Long. (Nad 83)	Date/Time of Onset of Flowback following HF or Refracturing	Date/Time of 1st Attempt to Direct Flowback to Separator	Date/Time of 1st Return to Initial Flowback Stage	Date/Time of 2nd Attempt to Direct Flowback to Separator	Date/Time of 2nd Return to Initial Flowback Stage	Date/Time of 3rd Attempt to Direct Flowback to Separator	Date/Time of 3rd Return to Initial Flowback Stage	Date/Time Well was Shut- in and Flowback Equipment Disconnected	Date and Time of Production Startup	Durations of: (hrs)				Disposition of Recovery	Reason for Venting	Claiming Technical Infeasibility? (If yes, attach Technical Infeasibility documentation.)	Deviations To Report? (If yes, put an 'X'. If not, leave blank.)
													Flowback	Recovery	Combustion	Venting				
512341481	HORSETAIL 08B-1743	(b) (6)	(b) (6)	8/9/17 18:05	8/9/17 18:05							9/19/17 0:00	965.92	965.92			Sales line*	N/A	No	
3310504371	NELSON 21-18TFH	(b) (6)	(b) (6)	8/13/17 10:21	8/13/17 10:21							8/27/17 0:00	325.65	325.65			Sales line*	N/A	No	
3310504370	NELSON 21-18-2TFH	(b) (6)	(b) (6)	8/14/17 5:41	8/14/17 5:41							8/22/17 0:00	186.32	102.32	84.00		Sales line*	N/A	Yes	

*Except for periods when venting or flaring duration is indicated. See the attached Technically Infeasible Checklists for more information.

Well Exemptions - NSPS Subpart OOOOa
Exempt from §60.5375a(a)(3)

US Well ID / API Number	Well Name	Lat. (Nad 83)	Long. (Nad 83)	Exemption Claimed	Start Date	End Date	Explanations
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[illegible]

Centrifugal Compressor Affected Facilities - NSPS Subpart OOOOa
§60.5420a(b)(3) and §60.5416a(a)(1-2)

						Bypass Requirements				
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[illegible]

Reciprocating Compressor Affected Facilities - NSPS Subpart OOOOa
§60.5420a(b)(4)

Reciprocating Compressor Affected Facilities - NSPS Subpart OOOOa
§60.5420a(b)(4)

[illegible]

Pneumatic Controllers Affected Facilities - NSPS Subpart 0000a
§60.5420a(b)(5)

§60.5420a(b)(5)

[illegible]

Storage Vessel Affected Facilities - NSPS Subpart OOOOa
§60.5420a(b)(6)

§60.5420a(b)(6)

[illegible]

Storage Vessel Affected Facilities Complying with §60.5395a(a)(2) - NSPS Subpart OOOOa
 §60.5420a(b)(6)(vii) referencing §60.5420a(c)(5)(vi)

[illegible]

Fugitive Emissions at each Well Site/Compressor Station - NSPS Subpart OOOOa
§60.5420a(b)(7)

Facility Name	Months Survey Waived per §60.5397a(g)(5)	Date of Survey	Time at Start of Survey	Time at Completion of Survey*	Operator(s) Conducting Survey	Operator OGI Training and Experience	Conditions During Survey			Monitoring Instrument Used	Deviations from Monitoring Plan?	Difficult to Monitor		Unsafe to Monitor		Deviations To Report? (If yes, put an 'X'. If not, leave blank.)
							Ambient Temp.	Sky Conditions	Maximum Wind Speed			Component Type	Count	Component Type	Count	
RAZOR 12F	N/A	1/5/2017	7:56:08 AM	8:30:08 AM	(b) (6)	FLIR cert., Internal initial and refresher training	0	Sunny	0	FLIR Systems GF320	No	N/A	0	N/A	0	X
FROELICH 21-28PH	N/A	1/6/2017	10:50:57 AM	10:51:46 AM		FLIR cert., Internal initial and refresher training	2	Sunny	5	FLIR Systems GF320	No	N/A	0	N/A	0	X
CORNABEAN 36O	N/A	1/6/2017	11:18:30 AM	11:18:30 AM		FLIR cert., Internal initial and refresher training	-4	Partly Cloudy	0	FLIR Systems GF320	No	N/A	0	N/A	0	X
Carscallen 14C	N/A	1/17/2017	10:53:11 AM	11:34:04 AM		FLIR cert., Internal initial and refresher training	24	Sunny	0	FLIR Systems GF320	No	N/A	0	N/A	0	X
OBRIGEWITCH 29D	N/A	1/23/2017	10:49:32 AM	10:49:58 AM		FLIR cert., Internal initial and refresher training	25	Cloudy	5	FLIR Systems GF320	No	N/A	0	N/A	0	X
WOLD 7P	N/A	1/25/2017	2:02:08 PM	3:12:03 PM		FLIR cert., Internal initial and refresher training	16	Cloudy	10	FLIR Systems GF320	No	N/A	0	N/A	0	X
3J TRUST 34-8PH	N/A	1/30/2017	8:57:56 AM	8:58:27 AM		FLIR cert., Internal initial and refresher training	35	Partly Cloudy	25	FLIR Systems GF320	No	N/A	0	N/A	0	X
BUCKMAN 34-9PH	N/A	2/6/2017	7:30:41 AM	7:31:41 AM		FLIR cert., Internal initial and refresher training	6	Cloudy	10	FLIR Systems GF320	No	N/A	0	N/A	0	X
P BIBLER 31N	N/A	2/6/2017	9:03:27 AM	10:17:45 AM		FLIR cert., Internal initial and refresher training	1	Cloudy	2	FLIR Systems GF320	No	N/A	0	N/A	0	X
P BIBLER 31P	N/A	2/7/2017	8:09:50 AM	9:17:56 AM		FLIR cert., Internal initial and refresher training	-6	Snow	1	FLIR Systems GF320	No	N/A	0	N/A	0	X
P EARL RENNERFELDT 3B	N/A	2/8/2017	9:01:43 AM	9:34:59 AM		FLIR cert., Internal initial and refresher training	-19	Sunny	10	FLIR Systems GF320	No	N/A	0	N/A	0	X
SC-TSB 2-24	N/A	2/8/2017	10:22:07 AM	10:23:01 AM		FLIR cert., Internal initial and refresher training	-10	Sunny	10	FLIR Systems GF320	No	N/A	0	N/A	0	X
Chameleon State 16B-1	N/A	2/17/2017	7:20:50 AM	9:59:45 AM		FLIR cert., Internal initial and refresher training	38	Cloudy	20	FLIR Systems GF320	No	N/A	0	N/A	0	X
RAZOR 30K Pad	N/A	2/20/2017	7:47:43 AM	9:24:20 AM		FLIR cert., Internal initial and refresher training	44	Sunny	13	FLIR Systems GF320	No	N/A	0	N/A	0	X
GULLIKSON 34P	N/A	2/22/2017	12:19:38 PM	12:59:15 PM		FLIR cert., Internal initial and refresher training	30	Cloudy	12	FLIR Systems GF320	No	N/A	0	N/A	0	X
CHARGING EAGLE 19I	N/A	2/23/2017	8:12:06 AM	8:12:28 AM		FLIR cert., Internal initial and refresher training	27	Cloudy	0	FLIR Systems GF320	No	N/A	0	N/A	0	X
ROLLA FEDERAL 3B	N/A	2/28/2017	9:49:44 AM	10:21:31 AM		FLIR cert., Internal initial and refresher training	12	Cloudy	10	FLIR Systems GF320	No	N/A	0	N/A	0	X
ROLLA FEDERAL 3C	N/A	2/28/2017	11:16:59 AM	11:50:10 AM		FLIR cert., Internal initial and refresher training	13	Cloudy	9	FLIR Systems GF320	No	N/A	0	N/A	0	X
ROLLA FEDERAL 3D	N/A	2/28/2017	12:20:10 PM	12:57:47 PM		FLIR cert., Internal initial and refresher training	13	Cloudy	12	FLIR Systems GF320	No	N/A	0	N/A	0	X
OBRIGEWITCH 21-16TFH	N/A	3/1/2017	9:48:12 AM	9:48:46 AM		FLIR cert., Internal initial and refresher training	20	Sunny	10	FLIR Systems GF320	No	N/A	0	N/A	0	X
OBRIGEWITCH 21-29PH	N/A	3/1/2017	8:31:26 AM	8:32:00 AM		FLIR cert., Internal initial and refresher training	15	Sunny	10	FLIR Systems GF320	No	N/A	0	N/A	0	X
Obrigewitch 29A	N/A	3/1/2017	8:16:47 AM	8:17:18 AM		FLIR cert., Internal initial and refresher training	15	Sunny	10	FLIR Systems GF320	No	N/A	0	N/A	0	X
P BERGER 7N	N/A	3/9/2017	7:23:01 AM	9:50:23 AM		FLIR cert., Internal initial and refresher training	8	Partly Cloudy	5	FLIR Systems GF320	No	N/A	0	N/A	0	X
P LYNCH 33N	N/A	3/9/2017	12:00:04 PM	12:33:33 PM		FLIR cert., Internal initial and refresher training	5	Partly Cloudy	6	FLIR Systems GF320	No	N/A	0	N/A	0	X
FLATLAND FEDERAL 11-4 CTB	N/A	3/17/2017	8:23:14 AM	9:45:15 AM		FLIR cert., Internal initial and refresher training	32	Partly Cloudy	15	FLIR Systems GF320	No	N/A	0	N/A	0	X
HORSETAIL 29G Pad	N/A	3/17/2017	11:07:55 AM	11:17:29 AM		FLIR cert., Internal initial and refresher training	51	Partly Cloudy	7	FLIR Systems GF320	No	N/A	0	N/A	0	X
KOALA 31P	N/A	3/21/2017	12:33:08 PM	1:09:49 PM		FLIR cert., Internal initial and refresher training	24	Sunny	17	FLIR Systems GF320	No	N/A	0	N/A	0	X
DORE 3-10X	N/A	3/22/2017	11:51:41 AM	11:52:19 AM		FLIR cert., Internal initial and refresher training	33	Partly Cloudy	12	FLIR Systems GF320	No	N/A	0	N/A	0	X
HECKER 21-18TFH	N/A	3/23/2017	8:19:00 AM	8:19:50 AM		FLIR cert., Internal initial and refresher training	35	Cloudy	5	FLIR Systems GF320	No	N/A	0	N/A	0	X
LUKENBILL 11O	N/A	3/23/2017	8:26:29 AM	9:25:48 AM		FLIR cert., Internal initial and refresher training	35	Partly Cloudy	2	FLIR Systems GF320	No	N/A	0	N/A	0	X
SKUNK CREEK 4-18-17	N/A	3/27/2017	1:00:47 PM	1:01:19 PM		FLIR cert., Internal initial and refresher training	50	Partly Cloudy	5	FLIR Systems GF320	No	N/A	0	N/A	0	X
Moccasin Creek 26H	N/A	3/28/2017	10:44:30 AM	10:45:58 AM		FLIR cert., Internal initial and refresher training	35	Cloudy	5	FLIR Systems GF320	No	N/A	0	N/A	0	X
CHARGING EAGLE 25C	N/A	3/30/2017	9:26:41 AM	9:27:06 AM		FLIR cert., Internal initial and refresher training	40	Cloudy	10	FLIR Systems GF320	No	N/A	0	N/A	0	X
K WOLD 153-97-1-5	N/A	3/30/2017	9:35:47 AM	10:15:10 AM		FLIR cert., Internal initial and refresher training	44	Cloudy	4	FLIR Systems GF320	No	N/A	0	N/A	0	X
LIFFRIG 11-27H	N/A	3/30/2017	7:44:49 AM	8:12:06 AM		FLIR cert., Internal initial and refresher training	42.3	Cloudy	4	FLIR Systems GF320	No	N/A	0	N/A	0	X
P BIBLER 5C	N/A	3/30/2017	9:48:00 AM	10:12:33 AM		FLIR cert., Internal initial and refresher training	46	Partly Cloudy	6	FLIR Systems GF320	No	N/A	0	N/A	0	X
FRANK 34-7TFH	N/A	3/31/2017	12:58:33 PM	1:45:06 PM		FLIR cert., Internal initial and refresher training	54	Cloudy	5	FLIR Systems GF320	No	N/A	0	N/A	0	X
RAZOR 29F	N/A	3/31/2017	9:24:54 AM	9:48:54 AM		FLIR cert., Internal initial and refresher training	37	Cloudy	0	FLIR Systems GF320	No	N/A	0	N/A	0	X
RAZOR 08E	N/A	4/3/2017	10:10:59 AM	10:33:50 AM		FLIR cert., Internal initial and refresher training	47	Partly Cloudy	19	FLIR Systems GF320	No	N/A	0	N/A	0	X
NIEMI 44-22H	N/A	4/5/2017	9:49:57 AM	10:11:42 AM		FLIR cert., Internal initial and refresher training	44.8	Partly Cloudy	2	FLIR Systems GF320	No	N/A	0	N/A	0	X
TSB 14-33	N/A	4/10/2017	1:26:32 PM	1:27:05 PM		FLIR cert., Internal initial and refresher training	45	Sunny	10	FLIR Systems GF320	No	N/A	0	N/A	0	X
P EVITT 154-98-13	N/A	4/12/2017	11:49:12 AM	12:28:52 PM		FLIR cert., Internal initial and refresher training	40	Sunny	2	FLIR Systems GF320	No	N/A	0	N/A	0	X
LOOMER 33P	N/A	4/12/2017	9:01:33 AM	10:15:44 AM		FLIR cert., Internal initial and refresher training	41	Partly Cloudy	4	FLIR Systems GF320	No	N/A	0	N/A	0	X
Chameleon State 16D	N/A	4/13/2017	12:05:54 PM	12:35:59 PM		FLIR cert., Internal initial and refresher training	56	Sunny	28	FLIR Systems GF320	No	N/A	0	N/A	0	X
FLATLAND 9I	N/A	4/13/2017	9:20:50 AM	9:44:53 AM		FLIR cert., Internal initial and refresher training	56	Sunny	56	FLIR Systems GF320	No	N/A	0	N/A	0	X
KOALA 32M	N/A	4/13/2017	10:47:38 AM	11:43:11 AM		FLIR cert., Internal initial and refresher training	62	Sunny	25	FLIR Systems GF320	No	N/A	0	N/A	0	X
JOY TTT 42-30XH	N/A	4/14/2017	11:20:51 AM	11:45:43 AM		FLIR cert., Internal initial and refresher training	63	Sunny	19	FLIR Systems GF320	No	N/A	0	N/A	0	X
P Pankowski 6D	N/A	4/14/2017	10:00:27 AM	11:41:33 AM		FLIR cert., Internal initial and refresher training	56	Sunny	12	FLIR Systems GF320	No	N/A	0	N/A	0	X
HANSEN 21-3TFH	N/A	4/19/2017	9:58:43 AM	10:24:59 AM		FLIR cert., Internal initial and refresher training	42.2	Cloudy	14	FLIR Systems GF320	No	N/A	0	N/A	0	X
Koala 5P	N/A	4/21/2017	11:31:06 AM	12:18:10 PM		FLIR cert., Internal initial and refresher training	52	Partly Cloudy	7	FLIR Systems GF320	No	N/A	0	N/A	0	X
SMOKEY 2-16-21	N/A	5/22/2017	10:02:34 AM	10:19:06 AM		FLIR cert., Internal initial and refresher training	57	Partly Cloudy	9	FLIR Systems GF320	No	N/A	0	N/A	0	X
EVITT 12O	N/A	7/6/2017	11:40:16 AM	12:31:11 PM		FLIR cert., Internal initial and refresher training	79	Sunny	8	FLIR Systems GF320	No	N/A	0	N/A	0	X
NORTHERN 30B	N/A	7/6/2017	6:59:17 AM	7:15:46 AM		FLIR cert., Internal initial and refresher training	64	Sunny	8	FLIR Systems GF320	No	N/A	0	N/A	0	X

*In some cases, the start/end times of the surveys do not accurately reflect the inspection duration.

Operator elected to manually take notes and transfer them to the electronic data collection tool after the inspection.

Fugitive Emissions at each Well Site/Compressor Station - NSPS Subpart OOOOa
§60.5420a(b)(7)

Facility Name	Months Survey Waived per §60.5397a(g)(5)	Date of Survey	Time at Start of Survey	Time at Completion of Survey*	Operator(s) Conducting Survey	Operator OGI Training and Experience	Conditions During Survey			Monitoring Instrument Used	Deviations from Monitoring Plan?	Difficult to Monitor		Unsafe to Monitor		Deviations To Report? (If yes, put an 'X'. If not, leave blank.)
							Ambient Temp.	Sky Conditions	Maximum Wind Speed			Component Type	Count	Component Type	Count	
Horsetail 07 CPB West	N/A	8/1/2017	9:17:47 AM	1:58:41 PM		FLIR cert., Internal initial and refresher training	82	Sunny	4	FLIR Systems GF320	No	N/A	0	N/A	0	X

*In some cases, the start/end times of the surveys do not accurately reflect the inspection duration because the inspector elected to manually take notes and transfer them to the electronic data collection tool after the inspection.

Fugitive Emissions and Repair Information - NSPS Subpart OOOOa
§60.5420a(b)(7)

§60.5420a(b)(7)

[illegible]

Fugitive Emissions and Repair Information - NSPS Subpart OOOOa
§60.5420a(b)(7)

	Date of	Fugitive Emissions Detected	Was the component repaired per	Date of	Type of Instrument	Component Placed on Delay	Explanation for Delay of
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[illegible]

Fugitive Emissions and Repair Information - NSPS Subpart OOOOa

§60.5420a(b)(7)

Facility Name	Date of Survey	Fugitive Emissions Detected		Was the component repaired per §60.5397a(h)?	Date of Repair	Type of Instrument used to Resurvey	Component Placed on Delay		Explanation for Delay of Repair
		Number	Type				Number	Type	
Horsetail 07 CPB West	8/1/2017	1	Tank Thief Hatch	Yes	8/16/2017	FLIR Camera	0	N/A	N/A
Horsetail 07 CPB West	8/1/2017	1	Tank Thief Hatch	Yes	8/16/2017	FLIR Camera	0	N/A	N/A
Horsetail 07 CPB West	8/1/2017	1	Tank Thief Hatch	Yes	8/16/2017	FLIR Camera	0	N/A	N/A
Horsetail 07 CPB West	8/1/2017	1	Connector	Yes	8/1/2017	FLIR Camera	0	N/A	N/A
Horsetail 07 CPB West	8/1/2017	1	Tank Thief Hatch	Yes	8/16/2017	FLIR Camera	0	N/A	N/A
Horsetail 07 CPB West	8/1/2017	1	Tank Thief Hatch	Yes	8/16/2017	FLIR Camera	0	N/A	N/A
Horsetail 07 CPB West	8/1/2017	1	Tank Thief Hatch	Yes	8/16/2017	FLIR Camera	0	N/A	N/A
Horsetail 07 CPB West	8/1/2017	1	Valve	Yes	8/7/2017	FLIR Camera	0	N/A	N/A
Horsetail 07 CPB West	8/1/2017	1	Tank Thief Hatch	Yes	8/16/2017	FLIR Camera	0	N/A	N/A
Horsetail 07 CPB West	8/1/2017	1	Tank Thief Hatch	Yes	8/16/2017	FLIR Camera	0	N/A	N/A
Horsetail 07 CPB West	8/1/2017	1	Tank Thief Hatch	Yes	8/16/2017	FLIR Camera	0	N/A	N/A
Horsetail 07 CPB West	8/1/2017	1	Tank Pressure Relief Device	Yes	8/9/2017	FLIR Camera	0	N/A	N/A
Horsetail 07 CPB West	8/1/2017	1	Tank Pressure Relief Device	Yes	8/9/2017	FLIR Camera	0	N/A	N/A

Pneumatic Pump Affected Facilities - NSPS Subpart OOOOa

§60.5420a(b)(8)

Facility Name	Pump Description	Pneumatic Pump ID	Pump Condition	If control device is designed to achieve less than 95% emission reduction, specify what it is designed to achieve	If there has been a change in the reported condition during the reporting period		Comments	Deviations To Report? (If yes, put an 'X'. If not leave blank.)
					Date Previously Reported	Certification Statement		
Horsetail 07 East	HP Flare KO (P-402B)	0030256984	Emissions from the pneumatic pump are routed to a control device or process.	N/A			Routed to HP flare	
Horsetail 07 East	HP Flare KO (P-402A)	0030256986	Emissions from the pneumatic pump are routed to a control device or process.	N/A			Routed to HP flare	
Horsetail 07 East	VRU Scrubber (P-403A)	0030256987	Emissions from the pneumatic pump are routed to a control device or process.	N/A			Routed to LP flare	
Horsetail 07 East	LP Flare KO (P-401)	0030256989	Emissions from the pneumatic pump are routed to a control device or process.	N/A			Routed to LP flare	
Horsetail 07 West	LP Flare KO (P-401)	0030256985	Emissions from the pneumatic pump are routed to a control device or process.	N/A			Routed to LP flare	
Horsetail 07 West	VRU Scrubber (P-403A)	0030256990	Emissions from the pneumatic pump are routed to a control device or process.	N/A			Routed to LP flare	
Horsetail 07 West	HP Flare KO (P-402B)	0030256991	Emissions from the pneumatic pump are routed to a control device or process.	N/A			Routed to HP flare	
Horsetail 07 West	HP Flare KO (P-402A)	0030256994	Emissions from the pneumatic pump are routed to a control device or process.	N/A			Routed to HP flare	
Horsetail 30	HP Flare KO (P-402A)	0021597048	Emissions from the pneumatic pump are routed to a control device or process.	N/A			Routed to HP flare	
Horsetail 30	HP Flare KO (P-402B)	0021665696	Emissions from the pneumatic pump are routed to a control device or process.	N/A			Routed to HP flare	
Razor 12F	VRU Scrubber (P-403B)	0021665697	Emissions from the pneumatic pump are routed to a control device or process.	N/A			Routed to LP flare	
Razor 12F	VRU Scrubber (P-403A)	0021665698	Emissions from the pneumatic pump are routed to a control device or process.	N/A			Routed to LP flare	
Razor 12F	HP Flare KO (P-402A)	0030023813	Emissions from the pneumatic pump are routed to a control device or process.	N/A			Routed to HP flare	
Razor 12F	HP Flare KO (P-402B)	0030256995	Emissions from the pneumatic pump are routed to a control device or process.	N/A			Routed to HP flare	
Razor 12F	LP Flare KO (P-401)	0030256996	Emissions from the pneumatic pump are routed to a control device or process.	N/A			Routed to LP flare	
Razor 12H	VRU Scrubber (P-403A)	0030233021	Emissions from the pneumatic pump are routed to a control device or process.	N/A			Routed to LP flare	
Razor 12H	HP Flare KO (P-402A)	0030236374	Emissions from the pneumatic pump are routed to a control device or process.	N/A			Routed to HP flare	

Pneumatic Pump Affected Facilities - NSPS Subpart OOOOa

§60.5420a(b)(8)

Facility Name	Pump Description	Pneumatic Pump ID	Pump Condition	If control device is designed to achieve less than 95% emission reduction, specify what it is designed to achieve	If there has been a change in the reported condition during the reporting period		Comments	Deviations To Report? (If yes, put an 'X'. If not leave blank.)
					Date Previously Reported	Certification Statement		
Razor 12H	LP Flare KO (P-401)	0030236412	Emissions from the pneumatic pump are routed to a control device or process.	N/A			Routed to LP flare	
Razor 12H	HP Flare KO (P-402B)	0030312711	Emissions from the pneumatic pump are routed to a control device or process.	N/A			Routed to HP flare	
Razor 30K	VRU Scrubber (P-403)	0021635365	Emissions from the pneumatic pump are routed to a control device or process.	N/A			Routed to LP flare	
Razor 30K	HP Flare KO (P-402B)	0021635366	Emissions from the pneumatic pump are routed to a control device or process.	N/A			Routed to HP flare	
Razor 30K	HP Flare KO (P-402A)	0021635367	Emissions from the pneumatic pump are routed to a control device or process.	N/A			Routed to HP flare	
Razor 30K	LP Flare KO (P-401)	0021635368	Emissions from the pneumatic pump are routed to a control device or process.	N/A			Routed to LP flare	

Deviations - NSPS Subpart OOOO

§60.5420(b)(2-4)(ii); (5-6)(iii)

API Number	Facility Name/ Well Name	Equipment ID	Start Date	Start Time	End Date	End Time	Explanation
N/A	All Facilities listed on the Fugitive Emissions at each Well Site/Compressor Station - NSPS Subpart OOOOa Table	N/A	N/A	N/A	N/A	N/A	<p>For the deviations listed on the Fugitive Emissions at each Well Site/Compressor Station - NSPS Subpart OOOOa Table:</p> <p>1) Whiting was unable to identify a photographic record meeting the requirement contained in 40 CFR §60.5420a(c)(15)(ii)(E). Whiting has implemented this photographic record for surveys occurring from August 2017 forward.</p> <p>2) Whiting was unable to identify a record of an observation path, in furtherance of §60.5397a(d)(2), within the fugitive emissions monitoring plan. Whiting has no reason to believe any affected fugitive emissions component affected facility was not monitored as a result. Whiting further notes that during its inspections it did not deviate from any element of its fugitive emissions monitoring plan. Whiting cannot identify a requirement to disclose a deviation for not maintaining a record of the observation path; nevertheless and out of an abundance of caution, Whiting herein reports the above. Whiting has documented the observation path for subject facilities from August 2017 forward.</p>



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: 3J TRUST 34-8-2PH

US Well ID: 3308900882

Plan: Plan to route all flowback gas to pipeline for sale. In the event of gathering equipment shut down or malfunction, we would attempt to re-route gas flow to a different gathering system or reduce production, if needed, to avoid flaring or release of gas.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

The well flared for a total of 16 hours (approximately 559.5 MCF) on 5/15/17 18:00 to 5/16/17 9:00. The well was diverted from pipeline to flare in an attempt to kickoff production due to a low flowing pressure. Attempts to kickoff off production were successful and the well was diverted to pipeline.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

Yes, Tesoro ran a gas gathering line from this pad to connect into their Belfield Gas Plant and we plan to sell all flowback gas through Tesoro's line.

2. Re-inject gas possible?

N/A – gas lift was not a desired form of AL.

3. Use gas as fuel possible?

N/A

4. Use gas for other purpose?

N/A



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: EVITT 14-12-4TFHX

US Well ID: 3310504339

Plan: Collect all gas possible for pipeline sales

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

1. From 6/16/2017 8:00-10:00 gas totaling 66 MCF was flared during drill-out operations due to minor excess gas above pressure relief settings.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

All possible gas was collected into Oneok's gas gathering system.

2. Re-inject gas possible?

No

3. Use gas as fuel possible?

No

4. Use gas for other purpose?

No other use was possible for the gas during the flowback period.



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: EVITT 14-12H

US Well ID: 3310504072

Plan: Gather all gas for sales

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

1. On 5/26/2017 16:00- 6/3/2017 3:00 gas totaling 6304 MCF was flared during drill-out operations due to erratic flowrates and operational considerations.
2. On 6/15/2017 9:00-15:00, gas flared totaling 62 MCF due to high gas sales line pressure.
3. On 6/16/2017 7:00-12:00, gas flared totaling 242 MCF due to high gas sales line pressure.
4. On 6/19/2017 13:00-21:00, gas flared totaling 445 MCF due to high gas sales line pressure and gas line maintenance
5. On 6/21/2017 22:00- 6/22/2017 2:00 gas flared totaling 40 MCF due to high sales line pressure.
6. On 6/29/2017 2:00-9:00 gas flared totaling 123 MCF due to high sales line pressure.
7. On 7/1/2017 21:00-7/2/2017 12:00 gas flared totaling 53 MCF due to high sales line pressure and flowback equipment failures.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

All gas possible was collected into Oneok's gas gathering system.

2. Re-inject gas possible?

no

3. Use gas as fuel possible?

no

4. Use gas for other purpose?

no other possible use for gas during the flowback period.



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: EVITT 14-12TFH

US Well ID: 3310504074

Plan: Collect all flowback gas for sales

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

1. From 5/31/2017 7:00 to 6/5/2017 7:00 gas totaling 5690 MCF was flared during drill-out operations due to erratic flowrates and operational considerations.
2. On 6/29/2017 3:00-6/29/2017 9:00 gas totaling 79 MCF was flared due to high line pressure and excess gas.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

All gas possible was collected into Oneok's gas gathering system.

2. Re-inject gas possible?

No

3. Use gas as fuel possible?

No

4. Use gas for other purpose?

No other possible use for gas during the flowback period.



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: EVITT 34-12-2H **US Well ID:** 3310504160

Plan: Collect all gas for pipeline sales.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

From 6/28/2017 8:00 to 6/29/2017 15:00 gas totaling 237 MCF was flared due to excessive line pressure and high production rates keeping all gas from being sold.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

All gas possible was collected into Oneok's gas gathering system.

2. Re-inject gas possible?

No

3. Use gas as fuel possible?

No

4. Use gas for other purpose?

No other possible use for gas during the flowback period



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: EVITT 34-12H

US Well ID: 3310504162

Plan: Collect all possible gas for pipeline sales.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

1. From 6/13/2017 14:00 to 6/19/2017 14:30 gas totaling 288 MCF was flared during drillout operations due to unknown restrictions in sales line. Rocks, salt and sand were later discovered.
2. From 6/20/2017 15:00 to 7/3/2017 21:45 gas totaling 332 MCF was flared during drill-out operations due to restrictions found in the sales gas line.
3. From 6/29/2017 4:00 to 7/15/2017 15:45 gas totaling 53 MCF was flared during drill-out due to restrictions in the OneOK compressor station limiting sales.
4. From 6/13/2017 14:00 to 6/15/2017 9:45 gas totaling 158 MCF was flared during flowback due to maintenance on the gas sales line.
5. From 6/15/2017 17:00 to 6/20/2017 0:30 gas totaling 98 MCF was flared during flowback due issues with the Oneok compressor station
6. From 6/20/2017 9:00 to 7/3/2017 21:45 gas totaling 347 MCF was flared during flowback due to high line pressure in the sales line.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

All gas possible was collected into Oneok's gas gathering system.

2. Re-inject gas possible?

No

3. Use gas as fuel possible?

No

4. Use gas for other purpose?

No other possible use for the gas during the flowback period



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: EVITT 34-12TFH **US Well ID:** 3310504161

Plan: Collect flowback gas for pipeline sales.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

1. From 5/28/17 to 6/5/17 gas totaling 841 MCF was flared during drillout due to operational considerations and erratic fluctuations.
2. From 6/13/2017 19:00 to 6/16/2017 0:00 gas totaling 66 MCF was flared due to gas line maintenance work and minor sales line restrictions which prevented 100% of the gas going to sales.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

All gas possible was collected into Oneok's gas gathering system.

2. Re-inject gas possible?

no

3. Use gas as fuel possible?

No

4. Use gas for other purpose?

No other possible use for gas during the flowback period.



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: HORSETAIL 29G-2043 **US Well ID:** 051233880701

Plan: Plan to route all flowback gas to production facility and into sales.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

Flared approximately 62.3 Mcf on 6/11-6/12 2017 while oxygen was purged from the production equipment to prevent a plant upset.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

Yes, all gas gathering is in place and we plan to sell all flowback gas.

2. Re-inject gas possible?

N/A

3. Use gas as fuel possible?

N/A

4. Use gas for other purpose?

N/A



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: IRGENS 41-17-2H **US Well ID:** 3310504316

Plan: Route all flowback gas to pipeline for sales.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

- 1) On 8/24/17 at 2:00 hrs to 9:00 hrs during the cleanout gas was flared totaling 53.6mcf. Gas sales were temporarily locked out by 3rd party gatherer. Gas sales resumed and all gas was sent through the pipeline.
- 2) On 9/1/17 at 12:00hrs to 9/2/17 tat 10:00 hrs flowback gas was flared intermittently totaling 167.6 mcf. The flaring was a result of work being done to treaters and separators onsite. Once able, all gas produced was sold through the pipeline.
- 3) On 9/6/17 at 2:00 to 10:00 hrs flowback gas was flared totaling 120.6 mcf. The flaring was a result of a temporary restriction in gas take away capacity. All gas was sold into the pipeline once the issue was resolved.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

Gas to be routed through Oneok's gas gathering system

2. Re-inject gas possible?

no

3. Use gas as fuel possible?

no

4. Use gas for other purpose?

no



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: KOALA 14-32-2H

US Well ID: 3305307308

Plan: Flowing back well prior to green completions start date took effect. Well was open at a 49/64 choke and gas was flared throughout flowback for a total of 19 hours on 12/3/16 2000 - 12/4/16 1500.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

1. Well flared a total of 19 hours from 12/3/16 20:00 - 12/4/16 15:00 - Production line could not handle the gas flow rate necessary to remove debris from the well.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

1. Yes, Kinder Morgan ran a gas gathering line from this pad to their main line and we plan to sell all flowback gas through Kinder Morgan's line.

2. Re-inject gas possible?

1. N/A – gas lift was not a desired form of AL.

3. Use gas as fuel possible?

N/A

4. Use gas for other purpose?

N/A



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: KOALA 31-25-2H

US Well ID: 3305307520

Plan: Route all drillout and flowback gas to Kinder Morgan pipeline for sales.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

On 8/4/17 gas pipeline capacity was reached during drillout operations. Excess gas was diverted to flare during times of overcapacity of this operation between 6:00 - 16:00. 424 MCF was diverted to flare for the following reasons:

- 1) Steady progress was being made on the drillout, changing the rates by choking the well during this time would be hazardous to the drillout progress.
- 2) Choking the well back would decrease the return rate of the drillout, increasing the risk of plug debris and sand packing off around the tubing string.

On 8/18/17-8/20/17 gas pipeline capacity was reached during flowback operations. Excess gas was diverted to flare during times of overcapacity of this operation between 12:00 8/18/17 and 19:00 8/20/17. 8,127 MCF was diverted to flare for the following reasons:

- 1) Choking the well back would decrease the velocity of the fluid column, increasing the risk of plug debris and sand falling out and packing off downhole.
- 2) The well was cleaning up from sand during this time, changing the rates by choking the well during this time could be potentially harmful to the cleanup process of the well bore and damaging to near wellbore conductivity.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

Yes, Kinder Morgan ran a gathering line from this pad to their main line and we plan to sell all drillout and flowback gas through Kinder Morgan's gathering line.

2. Re-inject gas possible?

3. Use gas as fuel possible?

4. Use gas for other purpose?



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: KOALA 31-25-2TFH **US Well ID:** 3305307519

Plan: Route all drillout and flowback gas to Kinder Morgan pipeline for sales.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

On 7/26 a gas sales line leak was detected during drillout operations. All gas was diverted to flare during times between 6:00 - 15:00. 440 MCF was diverted to flare until the leak was fixed

On 7/27/17 - 7/29/17 a gas sales line leak was detected during drillout operations. All gas was diverted to flare during times between 7:00 7/27/17 - 16:00 7/29/17. 3,143 MCF was diverted to flare until the leak was fixed

On 8/21/17 - 8/23/17 gas pipeline capacity was reached during flowback operations. Excess gas was diverted to flare during times of overcapacity of this operation between 12:00 8/21/17 and 6:00 8/23/17. 1,346 MCF was diverted to flare for the following reasons:

- 1) Choking the well back would decrease the velocity of the fluid column, increasing the risk of plug debris and sand falling out and packing off downhole.
- 2) The well was cleaning up from sand during this time, changing the rates by choking the well during this time could be potentially harmful to the cleanup process of the well bore and damaging to near wellbore conductivity.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

Yes, Kinder Morgan ran a gathering line from this pad to their main line and we plan to sell all drillout and flowback gas through Kinder Morgan's gathering line.

2. Re-inject gas possible?

3. Use gas as fuel possible?

4. Use gas for other purpose?



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: KOALA 31-25-3H

US Well ID: 3305307521

Plan: Route all drillout and flowback gas to Kinder Morgan pipeline for sales.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

On 8/21/17 – 8/23/17 gas pipeline capacity was reached during flowback operations. Excess gas was diverted to flare during times of overcapacity of this operation between 9:00 8/21/17 and 6:00 8/23/17. 3,524 MCF was diverted to flare for the following reasons:

- 1) Choking the well back would decrease the velocity of the fluid column, increasing the risk of plug debris and sand falling out and packing off downhole.
- 2) The well was cleaning up from sand during this time, changing the rates by choking the well during this time could be potentially harmful to the cleanup process of the well bore and damaging to near wellbore conductivity.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

Yes, Kinder Morgan ran a (b) (9) line from this pad to their main line and we plan to sell all drillout and flowback gas through Kinder Morgan's gathering line.

2. Re-inject gas possible?

3. Use gas as fuel possible?

4. Use gas for other purpose?



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: KOALA FEDERAL 31-25H **US Well ID:** 3305307518

Plan: Route all drillout and flowback gas to Kinder Morgan pipeline for sales.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

On 8/18/17 – 8/21/17 gas pipeline capacity was reached during flowback operations. Excess gas was diverted to flare during times of overcapacity of this operation between 13:00 8/18/17 and 8:00 8/21/17. 4,429 MCF was diverted to flare for the following reasons:

- 1) Choking the well back would decrease the velocity of the fluid column, increasing the risk of plug debris and sand falling out and packing off downhole.
- 2) The well was cleaning up from sand during this time, changing the rates by choking the well during this time could be potentially harmful to the cleanup process of the well bore and damaging to near wellbore conductivity.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

Yes, Kinder Morgan ran a gathering line from this pad to their main line and we plan to sell all drillout and flowback gas through Kinder Morgan's gathering line.

2. Re-inject gas possible?

3. Use gas as fuel possible?

4. Use gas for other purpose?



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: KOALA FEDERAL 31-25HU

US Well ID: 3305307516

Plan: Route all drillout and flowback gas to Kinder Morgan pipeline for sales.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

On 8/1/17 – 8/2/17 Gas was flared because Kinder Morgan had the sales line locked. Gas was diverted to flare between 23:00 8/1/17 and 8:00 8/2/17. 995 MCF was diverted to flare.

On 8/2/17 – 8/6/17 gas pipeline capacity was reached during drillout operations. Excess gas was diverted to flare during times of overcapacity of this operation between 16:00 8/2/17 and 3:00 8/6/17. 2,997 MCF was diverted to flare for the following reasons:

1) Steady progress was being made on the drillout, changing the rates by choking the well during this time would be hazardous to the drillout progress.
2) Choking the well back would decrease the return rate of the drillout, increasing the risk of plug debris and sand packing off around the tubing string.
On 8/16/17 – 8/18/17 gas pipeline capacity was reached during flowback operations. Excess gas was diverted to flare during times of overcapacity of this operation between 15:00 8/16/17 and 6:00 8/18/17. 2,016 MCF was diverted to flare for the following reasons:

1) Choking the well back would decrease the velocity of the fluid column, increasing the risk of plug debris and sand falling out and packing off downhole.
2) The well was cleaning up from sand during this time, changing the rates by choking the well during this time could be potentially harmful to the cleanup process of the well bore and damaging to near wellbore conductivity.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

Yes, Kinder Morgan ran a gathering line from this pad to their main line and we plan to sell all drillout and flowback gas through Kinder Morgan's gathering line.

2. Re-inject gas possible?

3. Use gas as fuel possible?

4. Use gas for other purpose?



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: KOALA FEDERAL 31-25TFH

US Well ID: 3305307517

Plan: Route all drillout and flowback gas to Kinder Morgan pipeline for sales.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

On 8/16/17 – 8/17/17 gas pipeline capacity was reached during flowback operations. Excess gas was diverted to flare during times of overcapacity of this operation between 13:00 8/16/17 and 1:00 8/17/17. 1,334 MCF was diverted to flare for the following reasons:

- 1) Choking the well back would decrease the velocity of the fluid column, increasing the risk of plug debris and sand falling out and packing off downhole.
- 2) The well was cleaning up from sand during this time, changing the rates by choking the well during this time could be potentially harmful to the cleanup process of the well bore and damaging to near wellbore conductivity.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

Yes, Kinder Morgan ran a gathering line from this pad to their main line and we plan to sell all drillout and flowback gas through Kinder Morgan's gathering line.

2. Re-inject gas possible?

3. Use gas as fuel possible?

4. Use gas for other purpose?



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: LIFFRIG 11-27-2H **US Well ID:** 3306103830

Plan: This is a new completion on an existing pad with production facilities in place. The plan is to route all produced gas down the flow line and through the separator to sales.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

1. Flaring while drilling out plugs, 7/19/2017 24.8 MCF flared.
2. Bled down low pressure on the casing, 8/15/2017 3.21 MCF vented

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

The pressure was too low to make it into the separator or flow line.

2. Re-inject gas possible?

There are no reinjection wells nor compressors on location

3. Use gas as fuel possible?

The rig was not set up to use natural gas as a fuel source and the gas was in the water. There was no other need on location for the gas and the volume was too small.

4. Use gas for other purpose?

There was no other need on location (b) (9) small.



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: LOOMER 44-33-2H **US Well ID:** 3305306908

Plan: Plan to route all flowback gas to pipeline for sale. If pipeline cannot handle all produced gas, well will be choked back accordingly.

(b)
(9)

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

1. Well flared for a total of 10.5 hours on 2/9/2017 2300 - 2/10/2017 1200 - Kinder Morgan had sales line locked and were not able to get to location in time.
2. Well flared for a total of 2.5 hours on 2/20/2017 1200 - 2/20/2017 1500 - Kinder Morgan sales line suddenly went down- all gas was diverted to flowback flare. Issue resolved & all gas was captured there after.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

1. Yes, Kinder Morgan ran a gas gathering line from this pad to their main line and we plan to sell all flowback gas through Kinder Morgan's line.

2. Re-inject gas possible?

1. N/A- gas lift was not a desired form of AL.

3. Use gas as fuel possible?

N/A

(b)
(9)

4. Use gas for other purpose?

N/A



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: LOOMER 44-33-2TFH **US Well ID:** 3305306907

Plan: Plan to route all flowback gas to pipeline for (b) If pipeline cannot handle all produced gas, well will be choked back accordingly.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

1. Well flared for 25 hours 2/18/17 18:00 - 2/19/17 19:00 - Miscommunication between Whiting personell & Flowback operators. Flowback (Colter) was under impression to flare all excess gas after coil tubing was finished with drillout. Once Whiting personell found out miscommunication was corrected.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

1. Yes, Kinder Morgan ran a gas gathering line from this pad to their main line and we plan to sell all flowback gas through Kinder Morgan's line.

2. Re-inject gas possible?

1. N/A- gas lift was not a desired form of AL.

3. Use gas as fuel possible?

N/A

4. Use gas for other purpose?

N/A



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within (b) days after completion of flowback operations (b) (9)

(b) (9) a force majeure interruption of a Green Completion

(b) (9) Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: LOOMER 44-33TFHU **US Well ID:** 3305306909

Plan: Plan to route all flowback gas to pipeline for sale. If pipeline cannot handle all produced gas, well will be choked back accordingly.

1. Well flared for a total of 10 hours on 2/3/17 01:00 - 11:00- Kinder Morgan has sales line locked and were not able to get to location until morning. Once line was unlocked, all gas was captured & sold.

1. Route gas into a flow line or collection system possible?

main line and we plan to sell all flowback gas through Kinder Morgan's line.



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: LUKENBILL 34-11-1H **US Well ID:** 3310504270

Plan: All gas to be sold into Kinder Morgan gathering system

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

1. On 4/3/17 at 22:00 to 4/4/17 at 12:00 gas was flared during the cleanout due to a temporary interruption to gas gathering takeaway. The total volume of gas flared during this period was 155.5 MCF. Once resolved, all gas was sold into the pipeline.

(b)
(9)

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

All gas routed to gas gathering system.

2. Re-inject gas possible?

No

3. Use gas as fuel possible?

No

4. Use gas for other purpose?

No



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: LUKENBILL 34-11-2H **US Well ID:** 3310504267

Plan: Gather all gas into Kinder Morgan gathering system

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

1. On 4/12/17 at 3:00 to 7:00 gas was flared during the cleanout due to a temporary interruption to gas gathering takeaway. The total volume of gas flared during this period was 86.4 MCF. Once resolved, all gas was sold into the pipeline.
2. On 5/4/17 at 21:00 to 5/5/17 on 4:00 gas was flared during the flowback. A temporary increase gas gathering line pressures prevented sales. The total volume flared was 297 MCF during this interruption. Once the issue was resolved, all gas was sold into the pipeline and the flaring stopped.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

All gas routed into gas gathering system.

2. Re-inject gas possible?

No

3. Use gas as fuel possible?

No

4. Use gas for other purpose?

No



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: MCNAMARA 41-26H

U(b)** ell ID:** 3306103808
(9)

Plan: This is a new completion on an existing pad with production from [REDACTED] the plan is to route all produced gas down the flow line and through the separator to sales.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

1. Flared nitrogen gas while drilling out plugs 8/22/2017 3988.5 MCF flared.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

Nitrogen won't burn so were unable to send to gas plant

2. Re-inject gas possible?

There are no reinjection wells nor compressors on location

3. Use gas as fuel possible?

No, nitrogen won't burn, not a fuel source

4. Use gas for other purpose?

No reasonable use for nitrogen



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: MCNAMARA 42-26-3XH **US Well ID:** 3306103806

Plan: This is a new completion on an existing pad with production facilities in place. The plan is to route all produced gas down the flow line and through the separator to sales.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

1. Bled down low pressure on the casing and tubing, 8/31/2017 20.53 MCF vented.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

The pressure was too low to make it into the separator or flow line.

2. Re-inject gas possible?

There are no reinjection wells nor compressors on location

3. Use gas as fuel possible?

The rig was not set up to use natural gas as a fuel source. There was no other need on location for the gas and the volume was too small.

4. Use gas for other purpose?

There was no other need on location for the gas and the volume was too small.



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: NELSON 11-18H

US Well ID: 3310504309

Plan: Gather all flowback gas for pipeline sales

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

1. From 8/22/2017 7:00 to 8/22/2017 10:00 gas totaling 148 MCF was flared during drill-out due to operational concerns.
2. From 8/24/2017 22:00 to 8/26/2017 4:00 gas totaling 277 MCF was flared during drill-out due to operational concerns.
3. From 8/27/2017 20:00 to 8/28/2017 12:00 gas totaling 333 MCF was flared during drill-out due to operational concerns.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

All gas possible was gathered into Oneok's gas gathering system.

2. Re-inject gas possible?

No

3. Use gas as fuel possible?

No

4. Use gas for other purpose?

No other use for the flowback gas was possible.



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: NELSON 11-18TFH **US Well ID:** 3310504310

Plan: Gather all flowback gas for pipeline sales

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

1. From 9/2/2017 19:00 to 9/3/2017 13:00 gas totaling 122 MCF was flared during drill-out operations due to operational concerns.
2. From 9/17/2017 18:00 to 9/18/2017 11:00 gas totaling 1403 MCF was flared during flowback operations due to the pipeline sales compressors being down.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

All gas possible was gathered into Oneok's gas gathering system.

2. Re-inject gas possible?

No

3. Use gas as fuel possible?

No

4. Use gas for other purpose?

No other use was possible for the gas during the flowback period.



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: NELSON 11-18TFHU **US Well ID:** 3310504350

Plan: Collect all flowback gas for pipeline sales

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

1. From 9/7/2017 6:00 to 9/7/2017 12:00 gas totaling 303 MCF was flared during drillout operations due to operational considerations.
2. From 9/7/2017 18:00 to 9/8/2017 3:00 gas totaling 498 MCF was flared during drillout operations due to operational considerations.
3. From 9/30/2017 15:00 to 10/2/2017 1:00 gas totaling 83 MCF was flared during flowback operations due to high line pressures in the pipeline.
4. From 10/3/2017 14:00 to 10/4/2017 7:00 gas totaling 1057 MCF was flared during flowback operations due to high line pressures in the pipeline.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

All gas possible was collected into Oneok's gas gathering system

2. Re-inject gas possible?

No

3. Use gas as fuel possible?

No

4. Use gas for other purpose?

No other use was possible for the gas collected during the flowback period.



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: NELSON 21-18-2TFH **US Well ID:** 3310504370

Plan: Collect all flowback gas for pipeline sales

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

1. From 8/21/2017 15:00 to 8/22/2017 10:00 gas totaling 1942 MCF was flared during the drillout operations due to the compressor station being down.
2. From 8/24/2017 10:00 to 8/25/2017 10:00 gas totaling 517 MCF was flared during the drillout operations due to operational concerns.
3. From 9/17/2017 18:00 to 9/18/2017 12:00 gas totaling 2796 MCF was flared during flowback due to the sales line being shut-in.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

All gas possible was collected into Oneok's gas gathering system

2. Re-inject gas possible?

No

3. Use gas as fuel possible?

No

4. Use gas for other purpose?

No other use for the flowback gas was possible during the flowback period.



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: OBRIGEWITCH 44-8PHU **US Well ID:** 3308900869

Plan: Plan to route all flowback gas to pipeline for sale. In the event of gathering equipment shut down or malfunction, we would attempt to re-route gas flow to a different gathering system or reduce production, if needed, to avoid flaring or release of gas.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

The well flared for a total of 34 hours (approximately 90.2 MCF) on 5/10/17 19:30 to 5/12/17 10:00. Tesoro detected a leak at their Belfield gas plant inlet on 5/4/17. In order to repair the leak all production to the gas plant was shut off until the repairs were completed on 5/12/17. Once the repairs were made all gas was captured.

The well flared for a total of 2 hours (approximately 2.1 MCF) on 5/15/17 8:00 to 5/15/17 10:00. The well was diverted from pipeline to flare in an attempt to kickoff production due to a low flowing pressure. Attempts to kickoff off production were unsuccessful and the well was shut-in and flowback ended.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

Yes, Tesoro ran a gas gathering line from this pad to connect into their Belfield Gas Plant and we plan to sell all flowback gas through Tesoro's line.

2. Re-inject gas possible?

N/A – gas lift was not a desired form of AL.

3. Use gas as fuel possible?

N/A

4. Use gas for other purpose?

N/A



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: RAZOR 12H-0116B

US Well ID: 051233914600

Plan: Plan to route all flowback gas to production facility and into sales.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

Flared approximately 150.2 Mcf from 7/3 - 7/4/2017 while oxygen was purged from the production equipment to prevent a plant upset.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

Yes, all gas gathering is in place and we plan to sell all flowback gas.

2. Re-inject gas possible?

N/A

3. Use gas as fuel possible?

N/A

4. Use gas for other purpose?

N/A



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: RAZOR FEDERAL 12H-1315A

US Well ID: 051233914201

Plan: Plan to route all flowback gas to production facility and into sales.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

Flared approximately 26.3 Mcf on 6/27/17 while oxygen was purged from the production equipment to prevent a plant upset.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

Yes, all gas gathering is in place and we plan to sell all flowback gas.

2. Re-inject gas possible?

N/A

3. Use gas as fuel possible?

N/A

4. Use gas for other purpose?

N/A



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: RAZOR FEDERAL 12H-1316B

US Well ID: 051233914900

Plan: Plan to route all flowback gas to production facility then to sales.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

Vented roughly 15 mcf/ day for 0.05 hrs on 06/15/17: A Patriot Well Solutions wireline employee opened a HCR valve with approximately 1000 psi of pressure on the well that allowed an unintended pressure release of produced gas and fluids. The Patriot employee who opened the valve thought they were rigged up on a different well when the incident occurred. The HCR valve was immediately closed and the pressure was contained.

Flared approximately 90.4 Mcf on 7/3 -7/4/17 while oxygen was purged from the production equipment to prevent a plant upset.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

N/A

Action Details: Yes, all gas gathering is in place and we plan to sell all flowback gas.

2. Re-inject gas possible?

N/A

Action Details: N/A

3. Use gas as fuel possible?

N/A

Action Details: N/A

4. Use gas for other purpose?

N/A

Action Details: N/A



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: SKUNK CREEK 4-10-11-1H **US Well ID:** 3302501925

Plan: Route all flowback gas to pipeline for sales. Crestwood assured Whiting that the gas sales line would be ready prior to flowback.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

- 1.) 6/26/17 4 hours of flaring while pump trucks were being changed out
- 2.) 7/2/17 67 Hours of flaring due to sales pipeline shut in from foam issues at treater. All gas diverted to flare.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

Not an option when flaring events occurred

2. Re-inject gas possible?

Not possible due to unplanned and short duration of flared events

3. Use gas as fuel possible?

Not possible due to unplanned and short duration of flared events

4. Use gas for other purpose?

Not possible due to unplanned and short duration of flared events



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: SKUNK CREEK 4-10-11-1H3 **US Well ID:** 3302503036

Plan: Route all flowback gas to pipeline for sales. Crestwood assured Whiting that the gas sales line would be ready prior to flowback.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

- 1.) 6/29/17 3.9 hrs 36.5 Mcf flared. All produced gas was flared due to Crestwood pipeline being shutdown
- 2.) 6/29/17 313 hrs 3,567.8 Mcf flared. All produced gas being flared due to OneOk pipe line being down affecting Crestwoods gathering system

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

Not an option when flaring events occurred

2. Re-inject gas possible?

Not possible due to unplanned and short duration of flared events

3. Use gas as fuel possible?

Not possible due to unplanned and short duration of flared events

4. Use gas for other purpose?

Not possible due to unplanned and short duration of flared events



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: SKUNK CREEK 4-10-11-8H **US Well ID:** 3302503037

Plan: Route all flowback gas to pipeline for sales. Crestwood assured Whiting that the gas sales line would be ready prior to flowback.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

1.) 6/23/17 25 hrs 696.9 Mcf flared. Produced gas was flared until crestwood did final preparation to pipeline for gas sales

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

Not an option when flaring events occurred

2. Re-inject gas possible?

Not possible due to unplanned and short duration of flared events

3. Use gas as fuel possible?

Not possible due to unplanned and short duration of flared events

4. Use gas for other purpose?

Not possible due to unplanned and short duration of flared events



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: SKUNK CREEK 4-10-11-8H3

US Well ID: 3302501192

Plan: Route all flowback gas to pipeline for sales. Crestwood assured Whiting that the gas sales line would be ready prior to flowback.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

- 1.) 6/24/17 7.5 hrs 232.6 Mcf flared. Pipeline static pressure was higher than treater pressure, so gas was unable to enter pipeline.
- 2.) 6/26/17 5 hrs 67.5 Mcf flared. Pipeline static pressure was higher than treater pressure, so gas was unable to enter pipeline.
- 3.) 6/28/17 75.5 hrs 2,873.4 Mcf flared. Flaring due to Crestwoods line being at capacity dictated by OneOk plant issues.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

Not an option when flaring events occurred

2. Re-inject gas possible?

Not possible due to unplanned and short duration of flared events

3. Use gas as fuel possible?

Not possible due to unplanned and short duration of flared events

4. Use gas for other purpose?

Not possible due to unplanned and short duration of flared events



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: SMOKEY 2-16-21-16H **US Well ID:** 3305306859

Plan: Plan to route all flowback gas to pipeline for sale. If pipeline cannot handle all produced gas, well will be choked back accordingly.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

1. On 4/1/17 flared well for roughly 1 hour due to gas sales line at max pressure so diverted some flow to flare because rig was stuck in hole and didnt want to lose returns. Roughly 147 mcf flared.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

1. Yes, Targa ran a gas gathering line from this pad to their main line and we plan to sell all flowback gas through Targa's line.

2. Re-inject gas possible?

N/A

3. Use gas as fuel possible?

N/A

4. Use gas for other purpose?

N/A



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: SMOKEY 2-16-21-16H3 **US Well ID:** 3305306858

Plan: Plan to route all flowback gas to pipeline for sale. If pipeline cannot handle all produced gas, well will be choked back accordingly.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

1. Flared roughly 485 mcf for 7 hours on 3/23/17 from a pipeline failure from Targa.
2. Flared roughly 29mcf for .3 hours on 3/25/17 as pipeline max pressure was reached and some gas was diverted to flare
3. Flared roughly 42 mcf for 1 hour on 4/13/17 as Targa pipeline momentarily went down.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

1. Yes, Targa ran a gas gathering line from this pad to their main line and we plan to sell all flowback gas through Targa's line.

2. Re-inject gas possible?

N/A

3. Use gas as fuel possible?

N/A

4. Use gas for other purpose?

N/A



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: SMOKEY 2-16-21-16HA **US Well ID:** 3305306857

Plan: Plan to route all flowback gas to pipeline for sale. If pipeline cannot handle all produced gas, well will be choked back accordingly.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

1. Well flared for 10 hours on 3/19/17 00:00 - 10:00 - Sales pipeline pressured up to 100 PSI, gas was diverted through Colters kimray to the flare. Colter's kimray is set @ 95 PSI. BOP bag pressure cannot exceed 2500 PSI. Well pressure was at 2250 PSI on 40/64th choke. To exceed 2400 PSI on BOP bag would have been a safety hazard.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

1. Yes, Targa ran a gas gathering line from this pad to their main line and we plan to sell all flowback gas through Targa's line.

2. Re-inject gas possible?

N/A

3. Use gas as fuel possible?

N/A

4. Use gas for other purpose?

N/A



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: STATE 34-36-1TFH **US Well ID:** 3310504262

Plan: Route all flowback gas to pipeline for sales. After completion of the well Whiting kept it shut in waiting for the gas line to be connected, tested and ready for gas.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

On 3/23/17 8:00 to 21:00 hrs during flowback operations, the well flared a total volume of 835.1 MCF. Gas meter initially installed were too small and were causing a restriction to production. The original 2" meters were swapped out for a 3" meter. During this time, gas was diverted to the flare to allow for this work to be complete. Once the new meter was installed, gas sales resumed and flaring stopped. The restriction issue was resolved.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

1.) Gas gathered into Kinder Morgan gathering system

2. Re-inject gas possible?

No

3. Use gas as fuel possible?

No

No

4. Use gas for other purpose?

No



Green Completions - Technically Infeasible Checklist (Force Majeure)

Within 15 days after completion of flowback operations where **Green Completions were interrupted:**

Meeting: Operations Engineer will initiate review a force majeure interruption of a Green Completion

Purpose: Identify all possible reasons for a force majeure interruption of a Green Completion

Wells: STATE 34-36-2H **US Well ID:** 3310504265

Plan: *Route all flowback gas to pipeline for sales. After completion of the well Whiting kept it shut in waiting for the gas line to be connected, tested and ready for gas.

Discussion Items

Document each instance that Green Completions were interrupted and the cause.

1.) On 3/23/17 8:00 to 21:00 hrs during flowback operations, the well flared a total volume of 736.6 MCF. Gas meter initially installed were too small and were causing a restriction to production. The original 2" meters were swapped out for a 3" meter. During this time, gas was diverted to the flare to allow for this work to be complete. Once the new meter was installed, gas sales resumed and flaring stopped. The restriction issue was resolved.

Options for compliance with Green Completions

1. Route gas into a flow line or collection system possible?

Not during the meter change operation. With exception of the interruption described above, all other produced gas sold into Kinder Morgan's gathering system

2. Re-inject gas possible?

no

3. Use gas as fuel possible?

no

4. Use gas for other purpose?

no